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ORIGINAL ARTICLES

THE SURGICAL TREATMENT OF GOITER*

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In the past few years the thyroid gland has occupied a prominent place in the medical literature. Studies have been undertaken upon this gland, and the pathology which its perverted secretion produces upon the body. Again, as in other organs closely related by function or embryology, this gland has been studied with relation to other glands, of whose function we are as yet uncertain. That there are definite relations between the thyroid, pituitary gland, thymus and adrenals is generally admitted.

Taking our clinical and morphological data together in studies of the ductless glands, we will admit that here we also have a disease of the sympathetic nervous system. It would seem that the pituitary body also has a definite relationship with the sympathetic nervous system, composed as it is of two entirely different tissues, that apparently have entirely different functions. It is only necessary to observe certain clinical symptoms which are brought about as the result of minute cellular pathology, to convince us that a study of the ductless glands, of which the thyroid is one of the most active, is a most complex one. In certain conditions of hyperplasia of the anterior lobe of the pituitary gland we have great increase of connective tissue and bone, with pigmentation of the skin and lessening of the functions of the nervous system, etc.

In hyperplasia of the thyroid we find tachycardia, emaciation with nervous symptoms. In morphological changes in the adrenals we find a certain character of clinical symptoms, as pigmentation, chronic inflammation of the sympathetic nervous system, and marked prostration. What is the exciting cause of this cellular unstability?

The thyroid is very vascular, and receives its blood supply from the superior and inferior thyroid arteries, which form free anastomosis throughout the organ. The nerves are derived from the middle and inferior ganglia of the sympathetic, and accompany the blood vessels.

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STRUCTURE

The normal thyroid consists of closed vesicles of various shapes, connected by areolar tissue. The vesicles contain normally a glairy fluid, called colloid, and are lined with epithelial cells. According to Bloodgood the thyroid in young embryonic life is composed of acini lined by epithelial cells of characteristic type, and contains no colloid.

PHYSIOLOGY

Our knowledge of the importance of the thyroid gland has been derived in great measure from observation upon man and animals from whom the thyroid has been removed. Certain phenomena follow, which proves beyond a doubt that metabolism is disturbed. In cases where the glandular secretion is augmented, we find opposite phenomena.

There is a close relationship between the sexual functions in the female and the thyroid, for the thyroid enlarges during menstruation and pregnancy; in pregnancy without thyroid enlargement we must be on the outlook for eclampsia. A certain amount of thyroid is necessary to produce proper metabolism, and aberration from the normal organic constituent iodothyrin will produce marked functional and structural changes. We can readily believe that the secretory function of the thyroid is essential, and that the normal secretion is antitoxic.

The thyroid gland may become hypertrophied by multiplication of its areolar tissue, increase of colloid, be the seat of a neoplasm, or have marked essential cellular changes. Following such changes in the gland, whether they are incited by chemical or metabolic conditions, we have marked clinical manifestations.

DIAGNOSIS

In the diagnosis of the pathological changes which occur in the thyroid gland we will consider simple goiter, or enlargement of one or more lobes of the gland, without disorders of secretion, and exophthalmic goiter where, in addition to cellular changes, we have constitutional changes and symptoms.

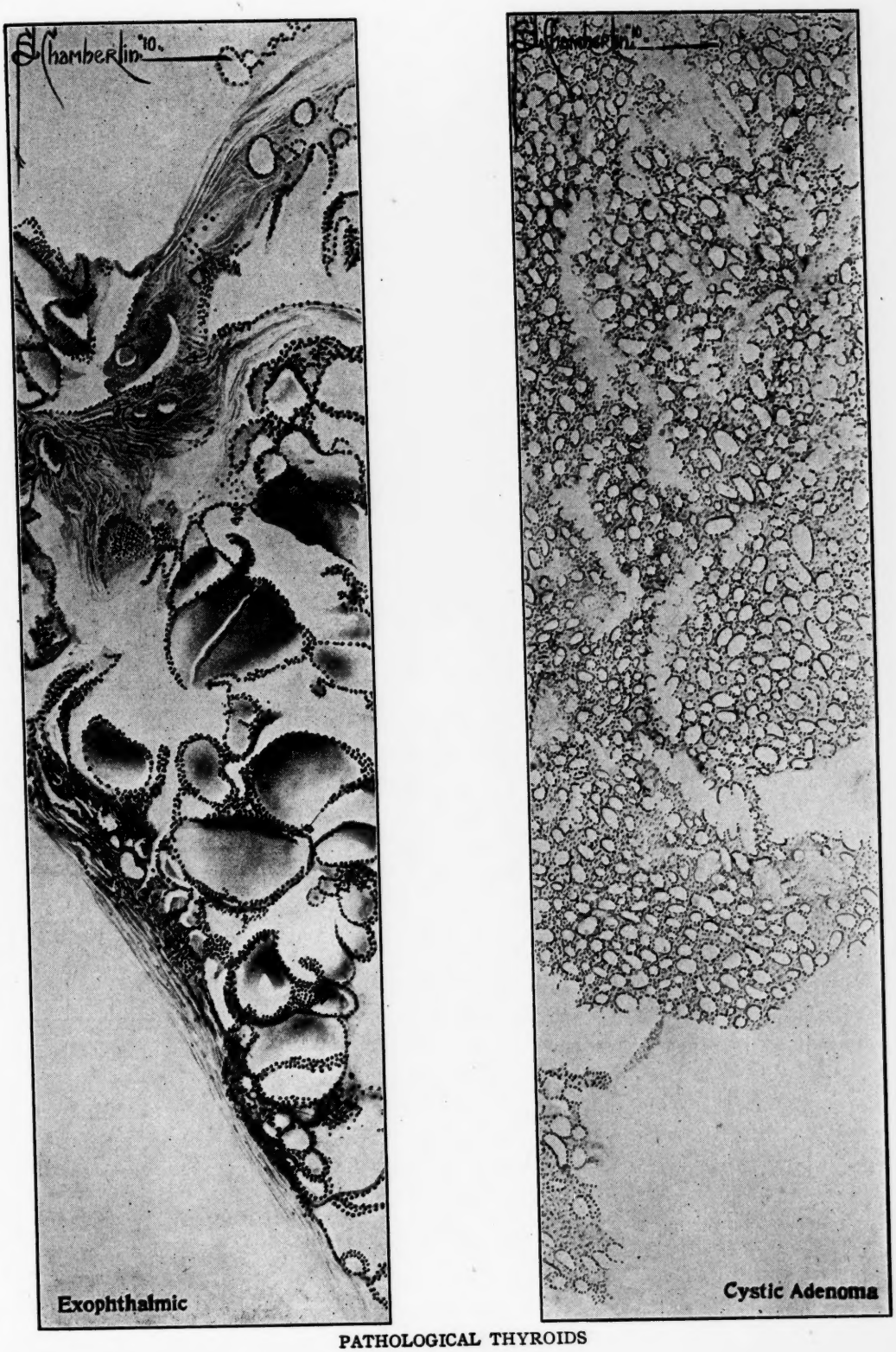
Ordinarily the diagnosis of simple goiter presents little difficulty; the enlargement is, as a rule, confined to one lateral lobe, usually the right, but both lateral lobes may be involved, or the median and one lateral, or both lateral and median.

In differential diagnosis we consider lymph nodules due to leukemia or pseudo-leukemia. Here we usually find glands along the outer border of the sterno-cleido muscle, and nodules appear higher on the neck.

Branchial and hypoglossal cysts present a more uniform surface, distinct fluctuation is present, and usually a congenital history. Carcinoma or sarcoma are rare, but must be considered in rapidly growing simple goiters. In malignant growths we find early infiltration of the capsule, which perverts the movability as in benign growths, and the skin appears tense. In the past two years we had three malignant cases, two sarcomata and one carcinoma.

DIAGNOSIS OF EXOPHTHALMIC GOITER

Early observers made the diagnosis from the exophthalmos present, with the enlarged thyroid; later was added the symptom of tachycardia. Many cases of Graves's Disease do not present any exophthalmos until later in the course of the disease, and long after the nervous symptoms and tachycardia have been prominent. One characteristic has been observed in this disease, that the early symptoms may vary from day to day and week to week, depending upon the absorbability of the altered secretion. The primary hyperplasia of the gland is in all probability nature's effort to combat this aberration from the normal. As yet we do not know if the exciting cause may be the circulatory apparatus or the



PATHOLOGICAL THYROIDS

sympathetic nervous system. In long-standing goiters, where we have beginning symptoms of Graves's Disease, we find tachycardia, nervous disorders, and tremors, followed with marked or slight increase in the size of the gland. Very severe symptoms are often caused by very small glands, depending upon the epithelial hyperplasia. In fact, many cases go for a time unrecognized on account of there being no apparent glandular enlargement. In many such cases all the typical symptoms may not appear until late in the disease, and if one is to wait for all to appear, we have terminal degeneration present, which seriously handicaps us in successful treatment. Other symptoms present in typical cases early are often muscular weakness, vertigo, Græfe's Sign, Stellwag's Sign, dyspnea, gastric and intestinal disturbances, sweating, anemia, emaciation, blood changes.

Every case of persistent tachycardia not accounted for by organic changes should be closely investigated. Nervous weakness appearing often at the same time as the tachycardia, may be sign of a disturbance of the sympathetic nervous system; patients' dispositions may entirely change.

TREMOR

This is a symptom nearly always present, often very early best obtained by having patient extend arm at right angle to body and separating the fingers. The tremor is very fine, eight to ten oscillations taking place in a second.

Muscular weakness shows itself in a patient when he cannot perform his ordinary vocation, and becomes easily fatigued, this often manifested before a physician is consulted, the patient complaining of dropping things. In cases presenting themselves for treatment for nervous disorders, it will always be well to eliminate hyperthyroidism before treating for hysteria.

EYE SYMPTOMS

Græfe's Sign.—In directing the eye downward the lower margin of the upper lid does not follow the line of vision as is normal: either does not follow at all or follows in an irregular manner.

STELLWAG'S SIGN

In marked exophthalmos there is retraction of the upper lid, and winking is less frequent; gastric and intestinal disturbances, probably caused by the poison acting as an irritant; and we have noticed that when these symptoms are at their worst, the thyroid appears engorged. Such cases invariably improve if elimination is thorough.

TREATMENT—SIMPLE GOITERS

Many cases of simple goiter may be cured by simple treatment; this may be hygienic, dietetic and medical. Surgery in such cases is safe and certain, and often the best treatment, and unless contraindications are present, the mortality will be nil. The goiters if troublesome from pressure on the trachea, may cause paralysis of the vocal cords on account of pressure upon the recurrent laryngeal nerve; may become malignant, or by cellular proliferation and structural changes, initiate that disorder called Graves's Disease.

TREATMENT OF EXOPHTHALMIC GOITER—NON-SURGICAL TREATMENT

One thing must be borne in mind in the non-surgical treatment: that if the treatment does not result in a cure or improvement in a comparatively short time, it should be discontinued, and if the case is a surgical one, resort should be had to surgical treatment before such a time has passed when the patient's condition is such as to admit of operative procedures. The most important treatment to insist upon is rest in bed, with mental rest as far as possible, easily digested, mostly vegetable diet, and symptomatic medical treatment, filtered water, etc.

Marine and Lenhart report in the examination of the thyroid of fish they found a fairly uniform thyroid hyperplasia in the fish of Lake Erie.

Fish from Yellowstone Park, from Utah to California, sea trout and bass from the Atlantic Ocean, showed no thyroid hyperplasia.

It is well known that goiter is endemic in regions depending upon Lake Erie for their water supply, both in man and the land animals. This finding is perhaps the most direct evidence that goiter may be associated with water.

Forscheimer has recommended the use of hydrobromate of quinine in five-grain doses three or four times a day. We have used this in many cases, but only as an adjunct in preparatory treatment for operation. Several cases which we have had under observation have made some improvement with this line of treatment. In the line of serum treatment Mœbus has produced a serum made from thyroidectomized goats known as antithyroidin; some good results have been reported upon its use. We have used it on several occasions, but with apparently no results; all the cases in which we have used it were very grave. Rogers and Beebe have a serum made from goiters which have been removed.

According to the published reports, this has been productive of many cures. We are using it at present, but have not tried it upon a sufficient number of cases. Dr. Beebe claims for it a percentage of cures, and our experience with it would teach us that careful serum therapy has a very wide field.

IODINE

This should never be used in exophthalmic cases, as it only aggravates the symptoms, especially the tachycardia.

OPERATIVE TREATMENT—THYROIDECTOMY

In all goiter operations we must suit our operation to our patient, and not perform enucleation when ligation is indicated, and we must choose our anesthetic for the same reason. Many surgeons perform all operations upon the thyroid with local anesthesia. We use ether in nearly all cases, while formerly we performed many under local anesthetic, always preceding it with a small dose of morphine and atrophine, and in some cases with a small dose of chloretone. In grave cases of exophthalmic goiter, it seems to us best to avoid all unnecessary excitement, and we have best avoided this by a general anesthetic.

Many cases of polar ligation of the arteries may be easily performed under local anesthetic. The patient is put on the table in the best position for breathing, about 45°, and all adjustments should be made before beginning the anesthetic. Anesthesia is only used for the first part of the operation, little or no ether is given at the last part, and the patient wakens on the table or a few minutes after.

TYPES, CLINICAL AND PATHOLOGICAL

1. Cases of moderate enlargement of the thyroid with mild symptoms of hyperthyroidism, usually nervous and circulatory. These glands show pathologically hyperemia and cellular hyperplasia of at least a portion of the gland.

2. Cases of hyperthyroidism which are associated with marked structural changes in the gland. These are the least satisfactory cases to treat, especially so when marked increase in gland is noticed simultaneously with hyperthyroidism. Pathologically these glands show greater parenchyma increase, and in some instances evidence of increased absorbable secretion with desquamation of epithelial cells.

3. Cases of long-standing goiter at first simple, upon which the symptoms of hyperthyroidism supervene. In such cases we often find an increase of colloid, which apparently means decreased absorption, also frequently areas of degeneration

DANGERS OF OPERATION UPON THE THYROID

In many cases the anatomy is greatly distorted, and all vessels enormously distended, so that in such cases thyroidectomy is a formidable operation.

The principal dangers are, injury to the recurrent laryngeal nerve, the parathyroids, hemorrhage, collapse of trachea and post-operative hyperthyroidism.

In all cases of huskiness of the voice the vocal cords should be examined prior to operation. The same precautions which serve to protect the parathyroids serve to protect the recurrent laryngeal. The field of operation must not be obscured, nor artery clamps allowed to clamp promiscuously.

The parathyroids are small glandular bodies which lie upon the posterior surface of the thyroid, and usually separated from that body by connective tissue. Their blood supply is from the parathyroid arteries, which are branches of the inferior thyroid. These glands have a definite function, and if all are removed or destroyed at operation, tetany soon develops and is always fatal. These are best avoided by keeping inside of the capsule of the thyroid.

HEMORRHAGE

All bleeding points must be tied, and large veins are best clamped before cutting.

HYPERTHYROIDISM

This is very dangerous and fatal sequela to an operation upon the thyroid, and follows of course the cases following marked hyperthyroidism before operation. In our severe cases our mortality has been two, both of which died from hyperthyroidism within thirty-six hours after operation. Both cases were delirious before operation, and resisted all medical treatment.

In the past six months we have operated upon twenty-six cases of goiter, twenty-one being operated upon by Dr. Augus McLean.

In this series there were six cases with all aggravated symptoms of Graves's Disease, cases in which the pulse was over 140, and could not be reduced below that by medical treatment. Marked emaciation and myocardial changes were also present. Two of these cases were delirious at times. In this group of six the operation which was performed was polar ligation of the affected lobes, the upper polar being ligated in four cases, and upper and lower in two.

All of these cases have made a marked improvement, two of whom have gained over fifteen pounds in less than six months. The gain in weight, along with the decrease in nervous symptoms and improved appetite, are the first signs of improvement which we have noticed, and we believe that the cases which gain in weight within a few weeks or months after the operation are permanently cured in so far as the hyperthyroidism is concerned.

In the other group of eight cases of exophthalmic goiter there were three in which the pulse was over 120, with rapidly increasing symptoms of Graves's Disease. The operation performed in four of these cases was polar ligation, and in four enucleations and excision. These cases have all been improved, and with one exception have no signs of exacerbations. In one case the upper pole was ligated, and while the symptoms have been modified, we believe that as soon as it is safe enucleation should be performed.

In the remaining twelve cases of cysts and cysto-adenomata the operation was enucleation or excision of one or both affected lobes.

We always plan to leave at least two-thirds of one lobe, if possible, to avoid myxedema. A later report of these cases and of cases operated upon prior to 1910, with technique, will soon be published.

PROGNOSIS

The prognosis is very good in all cases in which the patient is not already suffering from the results of degeneration. In our work on the thyroid, our entire mortality has been two cases, both of which died from hyperthyroidism. We have had no deaths in the last two years.

Our experience teaches us that the surgery of the thyroid is as exact as the pathology with which we have to deal.

Surgery may remove degenerated glands, but will not restore a long-continued intoxication of the myocardium to the normal.

Recovery follows in the ratio with which we remove the source of the disease.

57 West Fort Street.

DISCUSSION

DR. JOSEPH SILL, Harper Hospital, Detroit.—I would like to say one word in regard to the blood changes in exophthalmic goiter, because sometimes they are of considerable importance in diagnosis. The blood changes occur very early, when the diagnosis is difficult. We get in the first place an anemia due to the toxemia from which the patient is suffering; this is commonly masked by a concentration of the blood due to faulty heart action. We get a reduction in leucocytes, the loss falling chiefly on the polymorphonuclear forms, giving an apparent lymphocytosis and eosinophilia; the blood picture then shows a normal or high red cell count, a moderate loss in hæmoglobin, and reduction in leucocytes, with a relative lymphocytosis and eosinophilia. I have made blood examinations in a number of cases in which this blood picture was really the determining sign in the diagnosis of exophthalmic goiter.

DR. C. D. BROOKS (closing).—I did not have quite time enough for what I wanted to say about the dangers of the operations on the thyroid. They are principally of the parathyroid and recurrent laryngeal nerves and hemorrhage. By keeping inside of the capsule we avoid the parathyroids and recurrent laryngeal. We have seen cases which we know from our experience would not have survived any other operation, which will get well if a polar ligation is performed. Many cases which would not otherwise have lived, will soon be able to do their own housework.

A CONSIDERATION OF SURGICAL METHODS OF TREATING HYPERTHYROIDISM

Charles H. Mayo, Rochester, Minn., says that the glands of elimination are provided with an intermittent discharge, and among these is the thyroid. It is difficult to estimate the amount of hypersecretion; the entire absence of secretion might occur and be compensated by other glands of associated function. One can hardly tell the amount of oversecretion that can be neutralized by other glands. The author's observations cover over 2,000 cases operated on, and it is evident that the amount of disease in the gland varies much as to the appearance of symptoms. Goiter may be a reversion to a former function of the gland; hyperthyroidism is a toxemia due to absorption of thyroid secretion. The stimulus may be the same as was present in primitive man; this was then a normal stimulus. It may still be present in food or water, be formed through some process in the intestine, result from metabolism, or exist in the air. The types of goiter are but stages in a general process. Goiter may be classified as to pathology, into cystic, chronic parenchymatous hypertrophic, papillary cystic goiter, hypertrophic fetal goiter, and fetal adenoma of the thyroid. The operative mortality in surgical treatment of simple goiter is very low; in hyperthyroidism it is quite a different matter. This condition often causes death or invalidism. If fatal, death occurs within a few weeks of the beginning of the disease; seldom does it progress slowly to death. The ligation of vessels, nerves, and lymphatics seeks to cause a reversion to simple goiter. Early cases may be treated thus; serious cases with degeneration of heart, liver and kidneys, are also benefited by this operation, there being a gain in weight immediately. Over 1,100 patients operated on at St. Mary's Hospital show mortality after ligation of 37.10 per cent.; after extirpation of 39.10 per cent.; about 70 per cent. of the patients consider themselves cured.—*Medical Record*, December 31, 1910.

ACUTE POLIOMYELITIS*

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Individual cases of acute poliomyelitis were described by Underwood (1784), Shaw (1822), and Badham (1835), but the knowledge of this disease remained very limited, and its separation from the other forms of paralysis in childhood was not established. To Jacob Von Heine belongs the honor of being the actual founder of the doctrine of spinal paralysis in children. In 1840 he wrote a monograph on the disease and described especially well the atrophy and deformities. But the pathological anatomy of this affection remained obscure, one side claiming it was a spinal and the other a peripheral paralysis. In 1860, in his second edition, Von Heine came out in a flatfooted manner in favor of the spinal seat of the disease. Duchenne also favored this position. These views were based on clinical observations, and not from autopsy findings. Cornil (1863) was the first to recognize distinct alterations in spinal cord in this disease; but Prevost and Vulpian (1865) were the first to make the positive observation that the anatomical lesion was essentially situated in the gray horns.

It was not until about the time when the anatomical basis of the disease had been established, that it was proved to be not exclusively an affection of childhood, but one which might occur during adult life. This fact was first pointed out by Meyer and confirmed by Duchenne.

The history of the epidemic form in contrast to the sporadic cases has been well worked out by Starr, Collins and others Colmer reported in 1843 an epidemic around West Feliciana, Louisiana, occurring in 1841. This is the first epidemic of acute poliomyelitis reported. In 1908 Holt and Bartlett collected the literature of thirty-five epidemics, Starr reported forty-four; Collins adds twenty more to the list in 1910.

Following the 1907 New York epidemic, a commission appointed to study the same have gotten out a most comprehensive work on acute poliomyelitis epidemica. Much of Flexner's experimental work on monkeys is embodied in this report.

Acute poliomyelitis is a nervous disease in which inheritance plays no part. Girls and boys are equally susceptible. It occurs most commonly between the ages of one and four years. Adults are not immune to it. June, July, August and September are the months in which most cases have their onset. The disease is communicable at least in its epidemic form. The degree of infectivity does not necessarily correspond to degree of virulence. The virulence of the infection can be measured not only by the mortality of the disease, but also in many instances by the proportion of adults affected. Since adults have more resistance to infection than young children, a large proportion of adult cases usually indicates a more virulent infection.

The etiology of acute poliomyelitis has not been definitely settled. The experimental work by Flexner has thrown much light on this subject. During the preva-

*Read before the Huron County Medical Society, July 11, 1910.

lence of the 1907 epidemic in New York and vicinity, Flexner studied in various ways a large number of fluids, obtained by lumbar puncture. The cellular nature, protein strength, bacteriological contents and pathogenicity were investigated. Since September, 1909, when poliomyelitis reappeared in a form of a focalized epidemic in Greater New York and the adjacent country, he secured the spinal cord from two persons who had died of this disease. The conclusions of this work are as follows:

1. Transmission of disease (experimentally): (*a*) intracranial injection; (*b*) intraperitoneal injection; (*c*) intravascular injection; (*d*) intraneural injection; (*e*) intranasal or pharyngeal injection.

2. Infecting agent belongs to minute and filterable viruses with special affinity for cord and medulla. Virus may be of protozoan nature.

3. Virus is in: (*a*) cord and brain; (*b*) blood (certain stages of disease); (*c*) certain lymph glands; (*d*) mucous membrane of naso-pharynx.

4. Virulence: human cord will stand 2°—4° C for forty days.

5. Incubation period, four to thirty-three days.

6. Spinal fluid.—When a considerable dose of virus is injected intracerebrally, the cerebrospinal fluid shows the following changes at the various periods: (*a*) *twenty-four hours after injection*, normal quantity, contains a considerable number of small cells (size of lymphocyte with polyform nucleus), a few lymphocytes and some red corpuscles; (*b*) *forty-eight hours after injection*, white cells have increased in number, but polyform nuclei cells still predominate; (*c*) *seventy-two hours after injection*, a large number of mononuclear cells have appeared and fluid presents a striking opalescent appearance; (*d*) *fluid withdrawn on third day after injection* contains virus; (*e*) *on day of paralysis* (*sixth*) the fluid tends to be only slightly cloudy, and contains a mixture of large and smaller lymphoid mononuclear cells and a few cells with polymorphonuclear nuclei.

These experiments show that the cellular changes in the meninges and cerebrospinal fluid begin immediately after intracerebral injection of the filtrate, and are thus present several days before the onset of the paralysis. Should this observation be confirmed for human beings, a valuable method of diagnosis of atypical and abortive or non-paralytic cases would be secured. An abrupt change in the nature of the cerebrospinal fluid from being opalescent, rich in cells and spontaneously coagulable just before or at the time of the paralysis, to a more limpid fluid, poorer in cells, immediately after, often occurs.

7. Portal of entry.—It has been proven that acute poliomyelitis can be produced in monkeys by infections through the nose and pharynx with specific virus.

8. Portal of elimination.—There is one path at least through mucous membrane of nasopharynx.

9. Passive serum protection —Monkeys who recover from paralysis, either perfectly or with residues, are insusceptible to reinoculation with the virus.

The question therefore arose as to whether the immunity principles existed in the blood in sufficient concentration to be capable first of neutralizing the virus in vitro and next in bodies of infected monkeys. The experiments to determine the former were made with a maximal virus of which 2 c.c. of a filtrate were mixed with 2 c.c. of the serum of recovered cases, incubated for one hour at 37° C and then placed in refrigerator overnight. This mixture failed to cause paralysis in monkeys when injected intracerebrally, although the control animals succumbed in usual period. Normal monkeys' serum has no such restraining action. The successful outcome

of this experiment suggested that the blood of persons who had recovered from poliomyelitis contained similar immunity principles. The blood serum obtained from children was used for experiments. The monkeys having received the mixtures of filtrate and serum are still well, while control animals have succumbed.

Flexner drew the following conclusions: (1) that if the quantity of the virus injected into the brain eighteen to twenty-four hours before the serum treatment is begun is not in excess of a given dose, the action of the virus can be prevented; (2) that the infection of the meninges from the nasal mucosa can be also prevented by serum injections; (3) that normal monkey serum has no such restraining effect; (4) that horse serum is entirely without preventive action and tends rather to hasten the onset of paralysis.

10. Bacterial findings are either contaminations or secondary invaders.

11. Immunity.—An attack confers a definite immunity.

There are changes in both the interstitial and parenchymatous tissues, but the interstitial are of fundamental importance, and the parenchymatous are secondary to them. The ganglion cells are affected only secondarily, and when in contact with the inflammatory process around the vessels. The interstitial process is dependent upon its relation to the vessels for its character and its localization. While the lesions are most marked in the anterior horns of the cord, it is not confined to that portion of the gray matter, and hence the word "anterior" should not be used to designate the disease. The white matter of the cord is the seat of inflammatory changes of minor importance. The pia infiltration is an essential element in the pathological process. The involvement of the medulla, pons and basal ganglia always occur in fatal cases, though clinical experience has shown that such involvement does not necessarily mean a fatal prognosis. The ganglion cells in the medulla, pons and basal ganglia generally escape serious morphological alteration, even when they lie near foci of infiltrated tissue. This condition is in striking contrast to what occurs in the spinal cord. The brain cortex may show evidences of vascular irritation and sometimes of cellular infiltration. The œdema which is present in both white and gray matter is an important factor in producing the paralysis, and explains to a large extent the transitory character of the symptoms in cases which survive. The predominating rôle which has been ascribed to the central artery of the spinal cord by previous observers is unjustifiable. There is no evidence of thrombosis, which has been considered by some to be the cause of the pathological condition in this disease. Apparently the infective agent may affect any part of central nervous system.

The onset of acute poliomyelitis is sudden, with fever (usually), chill (at times), convulsions and delirium (perhaps), pain in back, body, limbs, and head (sometimes), and digestive disturbances, vomiting, diarrhœa, with general malaise. The fever lasts as a rule several hours or days. The paralysis begins in a day or two. Pain, rigidity of neck and back are due probably to meningeal involvement. The sphincters are not involved as a rule. Sensation is not lost. The course of the disease may be divided into four stages: (1) febrile (few hours to several days with rapidly increasing paralysis); (2) stationary period (one to six weeks); (3) stage of improvement (six to twelve months); (4) stage of permanent disability (rest of life). The character of paralysis: (1) flaccid in character; (2) atrophy of affected muscles; (3) reflexes of affected part are obliterated; (4) reaction of degeneration is present; (5) sphincters are not involved as a rule; (6) there is

an atrophy and lack of development in the bone, fasciæ and vessels; (7) there may be an increase in cutaneous fat.

Treatment.—(*a*) Onset of disease (treatment must be directed to relieving pain and to promoting elimination). 1. Calomel and castor oil, followed by some saline laxative. 2. Warm compresses or bath; catheter if necessary (for retention of urine). 3. Ice-cap (for headache). 4. Tepid sponge (water or alcohol), asperin, phenacetin, antipyrine (if fever is high). 5. Prolonged hot water bath (104° F) for fifteen minutes four times daily, with straightening out of limbs (for paralysis in acute stage). 6. Counterirritation with mustard plaster on spine from nape of neck to small of back.

(*b*) After treatment.—1. Nourishing food. 2. Voluntary movements. 3. Passive movements. 4. Massage. 5. Galvanism. 6. Surgical: (*a*) extreme cases, flaillike joints without muscular power, arthrodesis; (*b*) less severely afflicted cases, most muscles of leg involved, but muscles of thigh are strong enough to walk, use braces or arthrodesis; (*c*) mild cases, certain muscles of extremity are gone while other muscles are normal, tendon transplantation; (*d*) slight forms, nerve transplantation.

GENERAL CONCLUSIONS

1. Acute poliomyelitis (infantile spinal paralysis, acute atrophic paralysis, regressive paralysis) is an acute infectious disease, occurring chiefly in children and occasionally in adults. It is characterized by sudden loss of power in one or more limbs, and followed by rapid atrophy of the paralyzed muscles and by an imperfect growth of the limb affected. It is attended by pain which may be slight, but not by any permanent sensory disorders. Sporadic cases are constantly with us, while epidemics have occurred in Europe, Australia and America.

2. It occurs most commonly in children between ages of one and four years. June, July, August and September, are the months when most of the epidemic cases have their onset.

3. Flexner has proven that one portal of entry is the nasopharynx.

4. Virus is eliminated through the nasopharynx. Whether there are other modes of elimination has not been proved.

5. Infecting agent belongs to minute and filterable viruses. It may be protozoan in nature.

6. Incubation period is from four to fourteen days. It may be longer in some instances.

7. An early diagnosis is desirable (epidemic cases), and it has been suggested that the spinal fluid be withdrawn early. Many of these cases will show an increase of proteids and change in lymphocytes.

8. Serum treatment of this disease is still in an unsettled state.

9. It has been suggested that poliomyelitis, like meningitis, may be found to arise from several independent causes. It might be divided into epidemic form, with its specific virus, and other forms with their non-specific viruses.

10. In epidemic cases Collins suggests quarantine.

11. Apparently there is a difference in the mortality of sporadic and epidemic forms. In the latter the average is about 5%, while in the former 1% or less.

12. A thorough trial of hexamethylenamin would be desirable in the meantime, as well as a careful attention to the hygiene of the nasopharynx.

SOME PHASES OF PSYCHO-THERAPY*

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From earliest times that elusive will-o'-the-wisp, the influence of the mental over the physical, has fascinated and lured mankind on to ever deeper investigation. Its popularity has flagged now and then, but although suggestion was first practised by the serpent in Eden, it should not brand psychic means of influencing bodily states with that contempt too commonly accorded them.

Distinct references to psycho-therapeutic measures are found in the history of medicine in the early centuries, but in more recent history one recurs most readily to the frauds of Mesmer, when the rich and poor of Paris, alike, were the ready dupes of this charlatan, and even the government itself offered him 20,000 francs for the secret of his alleged animal magnetism. The dimly lighted apartments, into which patients were ushered to the accompaniment of slow music, the heavy perfume, the blue flame, all savor of the fraudulent, but the psychic effects were tremendous. Even earlier, Gassner had produced like effects by the laying on of hands, and how religious history is filled with accounts of the virtues of shrines, relics, and cults is a matter of common knowledge. Too often fraud and the grasping hand of the charlatan are seen, but they have but played for low ends with forces the deeper secrets of which they were too small to master and too insincere to delve for. Not all of these historic stages have been in vain. They have had their lesson. History is filled with illustrations of the mighty power of psychic means over bodily and mental departures from the normal. Do not, however, deem me a therapeutic Nihilist with reference to other measures, nor an apologist for or defender of the spurious and the fraudulent.

Revolt how he would, the patient student could not escape from the fact that here was a force to be reckoned with and worthy of a deeper study. Every thoughtful physician has been at times surprised with what he has accomplished without drugs or other means than his own personality, and has been made to realize that whether he will or no, his psychic influence is no small part of his success as a physician. He has come to know that not always is it his best office to administer drugs, that intangible but none the less certain influences often may do more for his patient at certain times than pill or potion. The very air with which a prescription is given may have not a little to do with its effect. The very positive suggestion that a remedy will produce a certain effect is at least many times a synergist. We are prone to forget that voluntarily or involuntarily we practise psycho-therapy in some form. If ever, with us it merits some careful attention that we may make the most of its possibilities.

It is too commonly contemplated from afar, as a fetich, worshipped only by the warped, and regarded as a mystical mummy whose wrappings it were a foolish waste of time to penetrate. Just as deep igno-

*Read at the Forty-fifth Annual Meeting of the Michigan State Medical Society, Bay City, September 28, 29, 1910.

rance and superstition may be fostered by this attitude as has been noted in the duped worshippers at the shrines of fraud and charlatanry. The superstitious phase, then, is a double-edged one, against which we need to guard ourselves. The broad-minded physician can ill afford to turn his back contemptuously upon all facts and thoughts of psycho-therapy.

There is something in it sufficiently convincing so that it has not lacked for a certain varying popularity. True, it is the pseudo-genuine phases which have swept in waves and attracted the larger numbers, and, as is the case in all fads, it is not from the most intellectual class that enthusiastic votaries have been largely drawn. Deep-thinking and level-headed leaders have at times been painfully surprised by an unexpected and frivolous popularity, born of meager thought and the desire for amusement; but sober thinkers have earnestly sought to elucidate the principles underlying psychic influence, and have been content to work patiently and studiously along lines of real merit.

Too long psychology was disregarded in these studies, and comparatively lately only has it come into its true relation as a fundamental science without which real advance in the knowledge of psycho-therapeutic principles is well-nigh impossible.

One of the very lightly considered and now (happily) passing phases is that hybrid movement which sought to establish a partnership between the Church and Medicine in the treatment of disease. Its founders had had some psychological training, and much was said about the psychological principles upon which all was based, but a popular lecturer upon the subject, in reply to my question as to what psychology had been of most help to him, replied that really he was not a psychologist and did not know much about psychology. I fancy that most of the leaders knew even less than he of psychological principles.

But how much more ignorant of disease, either organic or functional, these clerical therapeutists are. Amusing, indeed, is the smug satisfaction with which they have eagerly jumped to the conclusion that when once the medical partner had determined the functional nature of the disease, it was to be properly turned over to the clerical operator for treatment. The very conclusion that the clerical profession is better fitted than men of medical training to treat functional diseases is born of an ignorance of disease-conditions so great as in itself to bear the ultimate death-knell of the movement. Many estimable men of the cloth have scrambled into authorship upon the subject. I noted one making the statement that these functional diseases had only existed for the last fifty years, and between the pages of his work were other statements of equally profound wisdom. They flippantly criticize the practice of medicine, proclaim their ability to cure 80% of alcoholics, and even boast of cures by "absent treatment." But the gentlemen of the clerical profession are, for the most part, neither by education or training, fitted to be advisers in the management of disease-conditions, organic or functional, and it is a happy omen that the treatment of disease bids fair to never pass, to any large extent, into the hands of those so little fitted to judge of therapeutic needs, and medical partnership with the Church in the treatment of disease promises to be an abortive affair whose requiem we shall early hear.

Frivolous and worthy of little note are such attempts at psycho-therapy as we have recently heard so much about, when compared with that genuinely scientific and meritorious work founded on psychological principles and which has as its aim thus to rationally evolve an accurate knowl-

edge of the workings of the abnormal mind. Among those who have patiently labored to evolve the psychological principles which are most helpful in the treatment of abnormal psychic states, have been Freud and Jung. Freud has evolved principles of psycho-analysis which, though still much criticized, are nevertheless proving distinctly beneficial in the management of many mental cases. Especially helpful are his methods in obtaining an insight into the workings of the abnormal mind. This enables diagnosis, as it should, to precede therapy, and makes this intelligent and precise in aim, as it could not otherwise be. For sixteen years Freud has been working along these lines, and though they be somewhat intricate and complex, his work is becoming distinctly valuable and its scientific worth becoming more and more appreciated. Already some of our best asylums have assigned certain members of their staff to special work along the lines of psycho-analysis, and by these means the physicians have found themselves in position to more intelligently minister to their unfortunate charges.

Let me attempt to briefly and very elementarily elaborate some of the principles of this work. Although the normal mind absorbs and digests its ordinary train of mental processes, thus harmonizing the personality with its environment, it also successfully and permanently represses interpolated undesirable and improper thoughts. They are thus satisfactorily sidetracked. In some minds, however, this process is not so easily accomplished, and the repressed complex may act as a mentally irritating foreign body. Hence arises a conflict between two sets of mental processes, and thus is produced a defect in assimilation. The repressed complex may unconsciously assume activity and become annoying and beyond the control of the will, and this is likely to be the case with strivings, desires, and impulses, if not absorbed into the personality. Abnormally strong emotions may be awakened by anything associated mentally with the repressed complex.

This may be an involved process, and the difficulty may be large in tracing the way back from a symptom to the repressed complex, but this is one of the problems which by certain methods Freud sets out to accomplish. Then, if the patient can be made to appreciate the significance of his symptom and its relation to the mental process by which it is evolved, we shall be in a position to help him. This obviously presupposes intelligent coöperation on the part of the patient. The ignorant and uneducated could be little helped by these methods, of which there are several. Hypnosis is one, though this is little likely to find great favor in this country. That method developed and most used by Freud is founded upon the psychological law of association, though a study of conduct, mannerism, slips of speech or writing is not infrequently helpful in detecting some repressed train of thought.

Jung has done much to develop the word-reaction association method, and this is especially helpful and much used. A series of test words are called out to the patient, who responds with the first word thus suggested to him. The time-reaction is carefully noted, as also undue delay in responding, failure to respond at all, repetition of the test-word, slang associations, application of unusual meaning to the test-word as evidenced by the response, and incorrect reproduction of the reaction when the memory is thus tested. The patient's attitude or facial expression may betray the emotional tone of certain associations, and these are to be noted. Such methods have many times evolved a tolerably complete story of past happenings in the pa-

tient's life which have been hitherto repressed, and have led to painful mental disturbance. When these can be satisfactorily uncovered, the physician is obviously in better position to help his patient by suggestion or otherwise.

Freud has devoted much time and thought to the interpretation of the significance of dreams, and by this study he has had great success in reaching mental contents which had hitherto been kept hidden. He finds that dreams hark back to some repressed thought or experience, usually of a sexual nature, and though Freud has been freely criticized for his emphasis of the sexual, yet it is surprising how frequently true it is that the mental departure from the normal dates back to some unfortunate sexual train of thought or sexual experience, in cases of hysteria, the various phobias, anxiety neuroses and other mental ills. The discovery of the origin of these dreams is often a revelation to the patient himself, and leads him to a possible control of the repressed mental complexes which had produced his morbid symptoms.

Is it not obvious that if we can, whether it be by a study of dreams and their interpretations or by the application of the association-tests, formulate a psycho-analysis which shall clear up the reason for a morbid mental state, we shall then be in a vastly better position to help an intelligent patient to correct his mental warrings and again adjust himself to his environment?

Suggestion, persuasion, re-education, all legitimate forms of psycho-therapy, have their more or less limited uses and accomplish no little good, but it has been my object to call your attention more especially to the work of Freud and give you a glimpse of some of its underlying principles, unsatisfactory though this may have been.

The work by these methods takes time, demands great patience, and often many seances are needed to unravel a tangled mind. It is sufficiently technical so that only those who have given it special attention are likely to attempt its methods, but it seems rational, founded on scientific principles, and is an advance of which the general practitioner should know, even if he is not to follow it in detail. Let me give you, in the words of another, a close student of Freud who has worked with him, an estimate of the value of his psycho-analytic methods. "In suggestion, the physician adds something to the patient's mind,—confidence, belief, etc.,—and thus makes the patient more dependent on him. The psycho-analytic method does not add; it takes away something, namely inhibition. It enables the patient to disentangle confused mental processes, and, by giving him control over the disharmonies of his mind, leads him to develop a greater measure of self-reliance and independence. The training received by the patient is thus an educative one in the highest sense of the word, for he not only achieves a richer development of will-power and self-mastery, but acquires an understanding of his own mind which is of incalculable value for future prophylaxis. He grows both in capacity to know and in ability to do."*

*Dr. Ernest Jones, in *Journal of Abnormal Psychology*.

NOTE—For Dr. Klingmann's paper, see the *Medical Record* for January 14, 1911.

DISCUSSION ON PAPERS OF DRS. HITCHCOCK AND KLINGMANN

DR. JOHANN FLINTERMAN, Detroit.—It has never seemed to me that cases of hysteria should be produced by the causes that the Doctor speaks of. As far as the sexual factor is concerned, I believe that is absolutely exaggerated. There are a great many people you see who have had an experience of that kind, but they are absolutely forgotten, sub-conscious, latent. I believe that hysteria is caused by the fact that these people have inability of the nervous system. They

respond very little, respond gradually, and sometimes fail to respond at all. Now all these things cannot be explained, as far as I know, by the statements of Freud and others.

Now as to the relation of past experiences, isn't it possible that the person is mistaken about it? Who knows everything that has happened in life, and with correctness? There is another factor. Hysterical people are liable to invent, to make themselves very conspicuous. We should be very slow to accept what Freud and Jung have given to the world. I read his book on "Psychology of Everyday Life," where he says that he is able to give a psychical analysis of a person who gives the number 1667, or any other number, but as far as that confession is concerned that it should relieve all the symptoms, I am very doubtful as to that.

DR. HITCHCOCK (closing the discussion).—Let me say that I wrote my paper after I had seen the program and read the abstract of Dr. Klingmann's paper. I tried to make my paper introductory to his. I am sorry Dr. Burr is not here. He has had some experience, and he has been reading much along these lines, and there have been several cases in which we have been mutually interested, and in which we have both been surprised to find how the sexual element came to light in cases in which it was little expected. While Freud has been criticized for his emphasis of the sexual, yet it is wonderfully surprising how frequently the mental disturbance seem to hark back to some repressed complex of a sexual nature, and by that it is not meant that these patients have been at all immoral.

One of the best-posted men on this line in this country is Dr. Ernest Jones, of Toronto. He worked with Freud for a year or more, and is quite enthusiastic as to this work. I tried to get him over here, and I received this letter from him last night, which I will read:

ERNEST JONES, Toronto, Ont.—I regret not to be able to avail myself of the kind invitation to join personally in the discussion on psycho-therapy, but should be glad of the opportunity of recording a few conclusions of my own experience. I have for years practised with the various forms of psycho-therapy, persuasion, suggestion, hypnotism, and so on, and recognize the fact that by means of practically all of them it is possible to obtain good and often brilliant results. Since learning the psycho-analytic method, however, I have discarded the others for the following reasons. The results obtained by this method far surpass in thoroughness and permanence those obtainable by any other; the patient is trained to a more complete personal independence, and has a greater power of dealing with the future difficulties of life; finally, the insight that the physician attains into the nature and structure of the neurosis is invaluable for his understanding of these disorders, and, therefore, for his capacity to manage them. The psycho-analytic method aims not at temporarily removing the symptoms, but at eradicating the source of the trouble; this can be done only by a knowledge of the meaning, origin and significance of the individual symptoms,—knowledge that can be obtained in no other way than by the use of this method. No harmful result has yet been observed in any case, and it is certain that with this form of treatment one can avoid many dangers that are sometimes inseparably bound up with the use of other forms, such as those relating to attachment of the patient to the physician, dependence on him, etc.

I am thoroughly familiar with the many objections that have been urged against this method of treatment, and am convinced that in every case they arise from misunderstanding, ignorance or prejudice. I have yet to hear of any objection that is not readily answered by knowledge of the subject, or by first-hand experience of it. In conclusion, my experience has shown me that in the psycho-analytic method we have a safe, reliable and fundamentally satisfactory form of treatment, which has not only given us a much-needed help in the management of the most baffling of disorders, but has greatly furthered our knowledge of the human mind both in health and in disease.

DR. KLINGMANN, Ann Arbor, in closing the discussion, said: The discussion presented by Dr. Jones is entirely in accord with my views. The psycho-analytic method of treatment is the only scientific psycho-therapeutic method, and is the only method based upon sound psychology and sound medicine. While this work has just begun, we have a scientific basis upon which we can develop not only sound treatment for the psychoneuroses, but also new methods of diagnosis which will lead to a clearer interpretation of the symptom complex in this class of cases. The opposition with which Freud has met is entirely due to views which his opponents have taken of the individual sexual life. Freud has a very broad conception of sexuality. So in the case reported in connection with the author's paper there was no sensual act, nevertheless, an indirect sexual trauma was the causative factor.

A BUSINESS MAN'S COLD*

J. VERNON WHITE
Detroit, Mich.

In presenting this title as a subject for discourse, I do it, not with the belief that a business man's cold differs in any way from a layman's cold, but simply to offer some suggestions that may be of help to that class of people who are forced to continue their daily occupations when this common malady overcomes them.

This disease, "a common cold," is often allowed to run riot: it is practically ignored by medical men, by medical schools, or by text-books. It is a disease which incapacitates members of every class of society, and which, especially in the old and the young, in the feeble and debilitated, often is followed by the severest consequences. Besides the great inconvenience it causes, it is an active factor in overburdening an already embarrassed heart, it increases the difficulties of the chronic sufferers from bronchitis and asthma, and it often sets up the final catarrh in the latter stages of phthisis. It is its frequency rather than its rarity that should invite our attention and arouse our interest.

What, then, do we understand by a business man's cold? It is a local inflammation of any part of the respiratory tract, extending from the external nasal meatus to the bifurcation of the bronchi and affecting people whose business affairs prevent them from giving this malady unrestricted attention.

With regard to prophylaxis, it is important that proper clothing be worn and that exposure be avoided as much as possible. The temperature of the room is to be kept at about 70°F. Direct drafts are to be avoided, but ventilation and pure air should be insisted upon. Attention to the hygiene of the nose and throat should never be overlooked. Due attention is daily paid to the surface of the body, even to the teeth; surely the nose and throat, a breeding-place for every imaginable kind of pathogenic micro-organism, should receive equal attention.

By such attention we mean the proper hygiene of these parts, which should consist in douching of the nose once daily with some bland antiseptic or normal saline solution. Besides this daily bathing is of importance. A cold plunge, or one modified by standing in warm water ankle deep, while the body is sponged with cold, should be a routine practice. This modified cold sponge prevents the chilly reaction so many complain of while indulging in cold plunges. Another great danger is to disregard the moisture developed during a morning walk by sitting quietly in an office, even in a draft, where one falls an easy prey to "catching cold."

In spite of these precautions, colds will sometimes develop. To what are they then due? To predisposing and exciting causes.

If a person habitually "takes cold," it can be pretty certainly affirmed that there is some anatomic abnormality causing an obstruction to drainage. This abnormality may be in the shape of deflec-

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tions of the septum, exostosis, ecchondrosis, certain irregularities in size or position of the turbinate bodies, polypi, adenoids, enlarged tonsils, or thickening of the soft tissues overlying the bony wall which have become subject to rapid alterations in thickness from active or passive congestion or œdema. Such conditions, if present, must receive appropriate treatment in the way of chemical applications, constitutional remedies, incisions, or resections, etc., as the case may require. These abnormalities are, however, not the real or exciting cause of a cold. They act by interfering with proper drainage, and thus place the parts in a more receptive mood to the primary exciting cause of the cold.

This primary exciting cause of a cold has in the last few years been studied very extensively. It was hoped that a specific micro-organism could be found from which a vaccine could be procured that would once and for all time settle the treatment of this common pathological process. The results of the different investigators along this line have, however, been far from uniform. The bacillus of Friedlander, bacillus influenzæ, bacillus septus, micrococcus catarrhalis, the streptococcus, pneumococcus and staphylococcus, all, have been isolated singly or in various combinations, and all or certain groups have been looked upon as etiological factors. Vaccines have been prepared and used; in some cases with striking and almost marvelous results, in others with apparently no effect. The bacillus of Friedlander, the bacillus septus, micrococcus catarrhalis and bacillus influenzæ have been isolated in the greatest percentage of cases, and vaccines prepared from cultures of these have given the most promising results. I believe that the time for a definite vaccine is not far off. However, until then we must be content with the symptomatic treatment by the internal and topical use of medicines and other agencies in the acute attacks. This symptomatic treatment should, however, always be preceded, or if impossible at the height of an acute attack, during the intervals, by a thorough examination of the parts, to ascertain the cause of any defective drainage that may be present. For it can be demonstrated that the re-establishment of drainage prevents attacks by disallowing or at least modifying the action of the primary exciting cause.

We all admit that a cold, unless caught in its very incipiency, in which case it can often be aborted, is a fair sample of a self-limited disease. Symptomatic treatment properly carried out can, however, do a great deal to relieve suffering and discomfort and prevent the process from becoming subacute or chronic, but still more it can ward off some of the dangerous sequelæ which readily lead to such direful consequences.

To give a brief outline, or rather a few suggestions, as to how this can best be accomplished, is the object of this paper.

We will not argue for a minute that the best treatment for a cold is to have the patient go to bed and remain there, take a good cathartic, a hot bath followed by some medicine which will aid diaphoresis. This, however, is not always practical, and with some people absolutely impossible. We are, therefore, obliged to select a mode of treatment which is inferior, but which will nevertheless be very effective in minimizing the pain and discomfort caused by the malaise, headache, sore throat, cough, nasal discharge, sneezing, etc.

Briefly stated, such treatment will be along the following lines. The chilly feeling and aching is best controlled by a capsule containing pulv. Doveri grs. i, quinine sulph. grs. 2, and pulv. capsicum gr. ½ or phenacetin grs. 2, given every three hours during the first twelve hours. That night

on retiring one dose of pulv. Doveri grs. 10, quinine sulph. grs. 5, is given. This is followed by a hot drink, and an hour later by calomel grs. 4 and sodii bi-carb. grs. 20. The hot drink and Dover's powder will encourage free perspiration. The following morning before breakfast a seidlitz powder, Rochelle salts, or some other alkaline cathartic administered. The patient may attend to his business, providing his temperature does not exceed 99½ or 100°F. The turgescence of the nasal mucous membranes can always be controlled by the application of a 1% solution of cocaine. This is a good preliminary to nasal douching now to be given twice daily. This will contract the tissues sufficiently to allow the douche to remove all thickened secretions. It will also afford comfort to the patient without interfering with the normal mucous secretions which we expect to encourage.

After the first twenty-four hours have expired and the patient is left with only a slight increase in the temperature, not to exceed 100°F, with the aching and chilliness diminished, I would not consider it detrimental for him to attend to his business. Allowing him to do this, I would prescribe a mixture of potassium iodide grs. 2, ammonium chloride grs. 5, every four hours in camphor water, besides a capsule containing quin. sulph. grs. 2, salol grs. 2, and phenacetin grs. 2, to be taken every four hours. The former will encourage free secretion from the mucous membranes, and the latter will control what little temperature and aching remain. I here will state that I consider that the free use of quinine has the most beneficial effect of any remedy I know of in establishing a defense against pneumonia. From experience, I have found that by dissolving the quinine in dilute hydrochloric acid, its action will be more accentuated and pronounced; it will not lie unabsorbed in the intestines and pass as such from the bowels.

Should any fever remain at the end of the forty-eight hours, I would continue the quinine, etc., at the same time advising another cathartic consisting of pulv. glycyrrhizæ co. However, in the absence of fever I would discontinue the quinine, etc., as well as the potassium iodide and ammonium chloride mixture and substitute ammonium carbonate for a few days.

The nasal mucous membrane is very sensitive and subject to many changes following "catching cold." Consequently it should be given due consideration. The uncomfortable sensation of sneezing, and the familiar symptoms of pain and fullness about the nose and forehead, with flushed face, and eyes suffused, all of which contribute to this uncomfortable feeling, can largely be controlled by a cream containing 1 to 20,000 parts of adrenalin chloride and 10% para-amido-ethyl-benzoate in a bland oleaginous base. This, applied, has a more lasting anesthetic and astringent effect than cocaine; besides, it is less toxic.

It has always been difficult to prevent excoriations of nasal mucous membranes and of the lips resulting from the constant irritating discharges that flow from these sufferers, but, by limiting this discharge after the fever has subsided, great comfort can be had by a snuff composed of, menthol grs. j; sodium bicarb. grs. ij; magnesium carbonatis (levis) grs. iij; cocaine hydrochloratis grs. iij; saccharine lactis. drams. iss.

Most marked relief follows the use of the powder. Its effects are immediate, highly agreeable to the patient, and continue for a number of hours. The above can be continued until the discharge lessens and the mucous membranes again become normal.

Should the patient interpose any objections regarding the use of the snuff, a good substitute is menthol grs. 6, chloroform

5, camphor grs. 5, liquid albaline or benzoinol ounces 2. Use in an oil atomizer every two hours.

The acute stage having passed away, we should not at once dismiss the case, but make another effort to ascertain whether any abnormality exists. Particular attention should be given the middle turbinate. We should see whether or not it occupies the whole space, thus preventing the flow of normal secretions. Obstructions from this cause favor the development of pathogenic micro-organisms, which in turn are very apt to set up endless sinus disease or other chronic inflammation. Enlargement of the inferior turbinates are not so frequently detrimental, but even they should receive proper consideration.

You will notice that I have not alluded to many remedies in treatment of the disease under discussion, because I fear the great number recommended for the relief of this condition, "a cold," might confuse the casual observer. Consequently I have only spoken of such as in my opinion are efficacious and direct in their action.

The constitutional treatment already referred to will, to a large degree, ensure relief to the ordinary pharyngitis and laryngitis, but should there arise an infectious sore throat as a part of one of the exanthematous diseases, proper treatment for the combined condition will of course have to be instituted.

I have only endeavored to give you a resume of the method I have followed for some time in the treatment of the ordinary "colds," with such variations as I have deemed necessary to meet unforeseen symptoms. All such treatment is to be carried out without confining the patient to bed or in any way preventing him from attending to his business, which in most instances he considers of paramount importance to his success in life. This very success, especially if acquired at the expense of bodily fatigue and mental restlessness, is one of the greatest evils of the day. Attained by such a tremendous sacrifice, it will never remain as a monument to our energies.

We must admit that this spirit of success prevails, and that it is foremost in every business man's mind. We are, therefore, forced to recognize a growing demand for a treatment that will permit him to follow his business pursuits without endangering his health and at the same time without sacrificing his interests. Such a treatment we have tried to set before you, and judging from our experience with this method in the past, it certainly deserves your consideration.

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DISCUSSION

DR. M. L. HOLM, Lansing.—I would like to ask Dr. White a question regarding etiology. We may have an atmosphere in cold weather or the winter months which has a high or relatively high humidity, but when such air is drawn into a room and heated, its capacity for moisture increases and the relative humidity diminishes. Thus in zero weather, the relative humidity may be say 75 or 80% saturation. When this same atmosphere is heated to 70 or 80° F., the relative humidity will fall to probably 15 or 20% saturation. An atmosphere with a relative humidity of only 15 or 20% is very dry and irritating to the nasopharyngeal mucosa. I would like to know whether, in Dr. White's opinion, the inhalation of such an atmosphere would not be an important factor in producing a cold. I have heard some physicians speak of "heat cold" in the winter months, and I have wondered whether it was not the absence of moisture rather than the heat which was the important etiologic factor.

DR. WHITE (closing).—It is true that atmospheric conditions are active causes in producing a cold by suddenly raising and lowering the surface temperature. But our aim should be to place the body, and especially the surface arterioles, in such a condition that these sudden changes of temperature can readily be borne without ill effect to the individual. This can be done by increasing and perfecting the "vascular tonus." The hygienic measures I have advocated, principally the cold plunge, will accomplish this better than anything else.

INDICATIONS FOR PROSTATECTOMY*

FRANK BURR MARSHALL, M. D.
Muskegon, Mich.

A large proportion of all old men have enlarged prostates. Seventy-five per cent. of men sixty years of age have hypertrophied prostate, but only about fifteen per cent. suffer inconvenience therefrom. Symptoms of large prostates develop between the ages of forty-five and sixty years most commonly, although they may be encountered in men of thirty-five or past eighty. The enlargement always begins before sixty, but may not cause inconvenience until later. Many men are to-day living in great discomfort because of an hypertrophied prostate, but have never consulted and may never consult a surgeon, the family physician being the only doctor consulted, and he so seldom examines the prostate the sufferer gets little comfort from his doctor's prescriptions; then the patent nostrums and the charlatans are tried.

Sexual neurasthenia, or phrenitis prostatica described by J. F. Percy, in which a large, usually soft prostate, that does not require the patient to use the catheter, but does cause sufficient irritation to produce inordinate sexual desire, and in some cases leads to sexual perversion, is cured by prostatectomy. These cases are usually found in men from sixty to seventy-five years of age. It is possible that the prostate gland has or produces an internal secretion. The prostate has been termed the sexual solar system. When the function of the prostate becomes perverted in the young man, it causes sexual neurasthenia. And I have yet to see the large irritable prostate in a man whose sexual mentality is well balanced.

Enlarged prostate, with retention of urine, produces various degrees of mental disturbance, even acute mania, which entirely disappears after prostatectomy.

Enlarged prostates are predisposed to malignant degeneration. An hypertrophied prostate in which nodules can be felt per rectum is most certainly carcinomatous, and only early removal yields good results.

Prostates that are the seat of multiple abscesses should be removed by the perineal route as soon as discovered; by the perineal route because of better drainage. Single abscess of the prostate may recover without prostatectomy, as has been observed in three of the author's cases.

All hypertrophied prostates that cause the patients to lead a catheter life should be removed.

A large percentage of hypertrophied prostates are complicated by cystitis, and many with pyelitis, and some with nephritis. Many have cystic calculi; but none of these complications contraindicate prostatectomy.

New growths of the prostate demand immediate removal.

A cystoscopic examination should precede operation if possible. It is not possible to introduce the cystoscope into the bladder in some cases, but this instrument should be used if possible, as so much valuable information may be obtained by viewing the posterior prostatic urethra and the bladder walls.

We occasionally find calcareous deposits in the mucous membrane around the internal meatus causing ridges to form that act

*Read before Kalamazoo Academy of Medicine, October 11, 1910.

as valves, at times, obstructing more or less completely the flow of urine.

The cystoscope assists greatly in determining the choice of route for operation (the suprapubic or perineal).

Glands the lobes of which project into the bladder are usually best removed through the suprapubic incision, as are those complicated by numerous small or very large calculi, also the calcareous submucus deposits before mentioned.

The preliminary incision of the bladder under local anesthesia for the purpose of providing drainage and employing almost continuous irrigation, has much to commend it in extremely feeble patients. Subsequently, as the patient's strength returns, the prostate may be removed with very slight shock following. The prostatic elevator or the assistant's finger in the rectum is indispensable to good suprapubic work. The perineal route is to be preferred in the majority of cases, because it affords more perfect drainage, and nearly any sized gland ever encountered may be removed by this route.

TECHNIQUE OF OPERATION

A large staff grooved on its posterior surface is placed in the urethra and held by an assistant. The author prefers a median incision one and one-half inches in length midway between the scrotum and anus. The scalpel is used to incise the skin only. Blunt dissection with artery forceps then is made to the membranous portion of the urethra. The finger locates the groove in the staff, and the scalpel incises the urethra against this groove.

The staff is then withdrawn and the finger pushed through the incision into the urethra and on through the internal meatus into the bladder. Then the hook or beak shaped prostatectomy knife is guided along the finger until the internal meatus is reached, the beak turned outward or laterally and drawn back, cutting the capsule and avoiding the vas. A similar incision is made in the capsule of the opposite side of the urethra in case both lateral lobes are to be removed. Only the anterior urethra is necessarily preserved. The finger now is made to enter the incision in the capsule and loosen the lobes, which are withdrawn by the forceps. Bleeding is controlled by very hot sponges. A self-retaining recurrent irrigating tube is pushed through the incision into the bladder, and three or four gallons of hot boric solution allowed to flow through it. The patient is given continuous rectal saline until he can drink water freely. He is given spartine for its diuretic effect. The bladder is irrigated with warm boric solution, one gallon every two or three hours for three days, at the end of which time the tube is withdrawn, and irrigations stopped.

The patient is kept in the Fowler position at first, and encouraged to walk about as soon as the irrigating tube is withdrawn.

He is told his life depends upon the amount of water he drinks.

These patients, more than any others, need water. They have been drinking very little water before operation because the more they drank the more discomfort they had.

After suprapubic operations the same general plan of irrigation is followed, but the tube is allowed to remain several days longer, as the drainage is not so perfect.

The flow of urine is always controlled by the three swells of muscles at the internal meatus. The capsule is never removed and the walls collapse. Perineal fistula will not heal if cystitis persists or calculi are present.

Let us give the poor old man fifteen minutes' time, which is all that is necessary to remove his enlarged prostate, and allow him to enjoy his declining years in urinary comfort, and he will bless us.

SPINA BIFIDA*

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Spina bifida is a congenital malformation of the spinal column resulting in a hernial protrusion of any of the structures contained within the spinal canal. The lumbar and sacral regions of the spine being the last to close in the embryo make this defect more common here than in other planes. The protrusion occurs more often posteriorly, but may appear through a lateral or anterior defect. It is of equal occurrence in either sex, and happens about once in one thousand births.

Etiology.—Its etiology is not well defined. Amniotic bands and local inflammatory processes, disproportion between the growth of the canal and cord, imperfect separation of the skin and medulla, and increased pressure from within, have been advanced by various authorities in explanation of the defect.

Embryology.—The nerve elements of the spinal cord are of ectodermic origin. The cord is an invagination of the ectoderm, forming a groove which in the embryo is widely open, gradually closing to form the neural tube.

The mesoderm supplies the serous, bony and muscular elements which surround the neural tube. A mal-union, or absence of the involuting mesodermic structures which form the vertebral arches and spinous processes, will leave a cleft through which the meninges alone, or together with the spinal cord, will protrude because of lack of support.

This defective closure of the spinal column may be partial or complete.

Complete absence of union of the walls of the medullary canal is termed "rachischisis," being an uninterrupted opening, extending from the cervical to the lumbar region.

This latter variety is of rare occurrence, and is not amenable to surgical interference.

In the circumscribed type of spina bifida, the protruding tumor may vary from three to fifteen centimeters (one to five inches) in diameter, having either a broad or pedunculated base.

Several cases are recorded in which the protrusion was anterior: one by Willard in a child two months old; by Emmet in a woman of thirty-six; by Robinson in a child of eleven months; and by Bryant in a woman of twenty-five, the origin of the tumor discovered by operation for supposed ovarian cyst. The fluid contained within these hernial tumors is always cerebro-spinal fluid.

Varieties.—The defect may be confined to one arch, often several are involved, and rarely all. In the majority there is an absence of epidermis, which serves as a starting-point for infection, by the extension of which a fatal meningitis may ensue. The epidermis always unites if the medullary canal closes, though the mesodermic structures may present defects. A cleft in the dura usually accompanies one in the bone, but the pia and arachnoid are always closed if the cord in its development has formed a central canal.

There is much confusion in the description of the varieties of spina bifida proper. Three forms are usually described: (1) spinal meningocele; (2) myelomeningocele, also called meningomyelocele; (3) myelocystocele, also called syringomyelocele.

* Read at the Forty-fifth Annual Meeting of the Michigan State Medical Society, Bay City, September 28, 29, 1910.

These forms have in common a cleft of the bone and of the dura, as a rule. Rarely a meningocele may protrude between two normal arches, in which case the opening often becomes closed, so that the sac no longer communicates with the subarachnoid space.

In meningoceles there is a hernial protrusion of the arachnoid in which cerebrospinal fluid collects, distending it to form a single globular cavity often of large size. The pedicle is narrow and as a rule the skin is normal in appearance. Myelocystoceles have a sac with a wide base, a somewhat flattened contour, often subdivided by partitions. Nerve roots, cauda equina, or flattened cord, may be contained within and attached to the sac wall.

In myelocystoceles fluid accumulates within the central canal, distends it and the over-lying substance of the cord, causing atrophy of this portion, this being especially noticeable in the dorsal region.

The sac does not contain nerve elements, as it is distended central canal.

This variety is often combined with deformities such as club feet and hydrocephalus.

Symptoms.—Many meningoceles give rise to no symptoms aside from the presence of the tumor; in other forms there may be paralysis of the bladder and lower bowel, often combined with varying degrees of paralysis and sensory disturbances of the lower extremities.

Diagnosis.—The congenital origin and position of the tumor filled with fluid, the tension of which varies with posture and the expiratory efforts of coughing, crying, etc., should render the diagnosis easy.

The X-ray examination, or palpation of the tumor under general anesthesia, should assist greatly in determining the sac contents and in guiding the surgeon as to operative procedure.

Prognosis.—The prognosis in general is unfavorable; most cases die early. Of 649 children that died of spina bifida in England in 1882, 612 were within the first year. Among 90 not operated upon, the majority died within the first few weeks; only twenty lived to be over five years of age.

Usually, as the tumor increases in size, the skin is liable to ulcerate, leading to perforation of the sac, infection of the meninges and death. Rupture of the sac may occasionally be followed by spontaneous cure. When the sac communicates freely with the central canal of the cord, sudden emptying may cause a quick fatal termination.

In the paralytic cases the constant danger of urinary sepsis always threatens life. The prognosis is most favorable in meningoceles, next in myelocystoceles, and least in myelomeningoceles.

Many of these patients surviving radical treatment die of hydrocephalus or the secondary effects of existing paralyses.

Treatment.—In many cases nothing but palliative treatment is indicated. Measures to prevent ulceration should be employed, with a view of tiding the condition along to a time best suited for radical treatment.

The surface should be kept clean by daily spongings with alcohol and the application of a drying powder, or smeared frequently with sterile vaselin. If rupture occurs, immediate excision and suture should be done, to avoid infection. Aspiration of a dram or two of the serum, followed by injection of an equal quantity of Morton's fluid, which is composed of iodine 10 grains, iodide of potassium 30 grains, and glycerin 1 ounce, may be employed when open operation is contraindicated.

This should be repeated every ten days for two or more times where there is promise of cure.

The injection method, however, is not

free from danger, and its efficiency is very questionable. Many of the cures reported by this means were undoubtedly in conditions of closed sac, where the communication between the sac and subarachnoid space, or central canal of the cord, was occluded, the iodine acting on the principle that it does when injected into closed serous sacs elsewhere.

In the report of the London Clinical Society of seventy-one cases treated by this method, thirty-five were cured, four improved, five not improved, and twenty-seven deaths—a mortality of 38%.

Morton's own statistics show a mortality of only 15.3%.

The cure by this method results from the adhesion of the sac walls due to inflammatory reaction.

At the present time, the open operation is almost invariably the one of choice. Hydrocephalus, marked paralyses, and irreparable deformities elsewhere, are considered contraindications for operation. Marked improvement, or even cure, has occasionally followed operation where the paralysis of the lower extremities was pronounced. It is evident that in all cases presenting moderate symptoms of paralysis the operation is indicated, and in the extreme conditions the operation should be advised, if for nothing more than relief from the unsightly deformity.

As Woolsley says, "An unfavorable result from the operation is no worse than is to be expected without operation." As to age, there is much diversity of opinion; some advise operation as early as possible, while others would wait for several months or years. The mortality is higher in those done within the first few months, that of 35%, as compared with 4.7%, in those five years old or over. Of the several varieties, meningoceles are the most favorable for operation.

Operative Technic.—Concerning the operation Murphy says: "Excision of the sac seems to be the radical and more desirable procedure. The sac is best attacked from the side because the fibres of the cord are more frequently spread and attached to the median portion of the posterior wall, within the line of embryonal cleavage.

"When the sac is pedunculated it should be first freed from its attachments to the skin and neighboring structures except its highest point, which is adherent to the over-lying layer; there an elliptical cutaneous flap should be permitted to remain attached to the sac wall. When the latter is freed to a level with the cord, a provisional ligature should be thrown about its neck and tied sufficiently tight to control leakage.

"The sac should be opened, and if the cord is not protruding, the ligature is firmly tied; an over-stitch of catgut should give it additional support.

"If the base is broad the same procedure should be followed, except that after opening the sac and inspecting the interior, the ligature should be removed and substituted by a careful suture of the pedicle after amputation.

"If the condition is found to be one of syringomyelia and if the cord protrudes into the sac, the cord fibres should be freed from their attachment to the meninges and replaced in their normal position; the opening in the sac closed with a suture that is not too readily absorbed.

"When the protrusion is one of syringomyelocele, the cord should be amputated in both directions and a careful end to end suture of the fibres made if the spina bifida be situated in the caudal zone. When above this zone, the cord should be freed and replaced within the dural sac without suture, the opening closed with little prospect of relieving any existing paralysis."

REPORT OF OPERATIONS

Case I.—Albert K., age seventeen months.

Large spina bifida of lumbo-sacral region with double talipes. Operation September 12, 1908. Ether anesthesia.

Sac excised by elliptical incision around base of tumor, and separated from surrounding structures down to level of arches. Temporary ligature of kangaroo tendon placed around neck of sac and tied sufficiently tight to control leakage.

Sac opened, and found to contain serum and slight protrusion of cord, which was easily replaced within the canal and ligature of base tied securely. Sac excised and cleft covered by catgut suture of muscles. Skin closed by silk-worm gut suture. Gauze drainage.

Patient suffered little shock and did well for following two days, when an attack of green stool diarrhœa caused infection of suture line.

Local and general conditions bad for following two weeks, when finally wound closed by granulation.

Result two years after operation.

No recurrence of tumor. Talipes not improved, although able to walk with marked deformity of feet.

Case II.—William W., age two years. Large spina bifida of lower cervical region. Tumor ruptured with leakage of serum, but not collapsed.

Patient unable to walk unless supported. Coördination of lower limbs imperfect. Operated March 21, 1910. Ether anesthesia.

Sac excised as before and previous technic followed, except that thumb and forefinger pressure of the neck of the sac was substituted for the provisional ligature.

Ruptured sac found to be a syringomyelocele and the one remaining intact a meningocele. No leakage from the arachnoid on emptying the meningocele, so the neck of the syringomyelocele, which was composed of cord substance protruding through the centre of the meningocele, was clamped as close within the canal as feasible, ligated and excised. Stump covered by remaining portion of meningocele and muscle. Skin closed without drainage. Recovery uninterrupted.

Present condition. No recurrence of tumor, walks without assistance, no disturbance of coördination.

DEDUCTIONS

The operation for the radical cure of spina bifida should be undertaken in all cases where there is promise of relief from the unsightly deformity, even if improvement from the existing paralysis does not appear probable.

Excision of the sac can be done successfully during the early months under conditions where the pedicle is not too broad, as the operation is here accompanied by little shock.

Sacs with broad pedicles are best suited for operation when the child has attained the age of two years or older.

The older the patient, the better promise of success; for the shock is less, as is also the danger of infection from bowel discharges. Any attempt at closure of the bony cleft is useless, for the reason that it increases the danger of shock and is rarely, if ever, successful.

Recurrence of the hernia is not the rule, provided there is no blocking of the circulation of the cerebro-spinal fluid.

This field in neurological surgery has been a very much neglected one, and is deserving of more attention on the part of the surgeon than is often manifested.

To again quote Woolsley, "An unfavorable result from the operation is no worse than is to be expected without operation."

REFERENCES

WOOLSLEY, "Surgery of Spine," in Keen's "System of Surgery."

MURPHY Monograph: "Neurological Surgery."

DISCUSSION

DR. ANGUS MCLEAN, Detroit.—I don't think I can add anything to this very interesting paper, which is one which is particularly interesting. I think we are fortunate that such a thing as this disease only happens rarely. As to prophylactic treatment, I don't think anything can be done, as it belongs to the respiration, the bronchials closing the fissure, and belongs to the same class of lesions as cleft palate, harelip, etc. I have not had a very great experience, but some of these cases are comparatively easy. In cases where you simply have a protrusion of the sac itself, or the true meninges, these are closed off with a small base. Of course this is where you have the cord like syringo-meningocele; where you have some of the divisions of the cord passing down inside of the sac, that has usually to be tucked in plaster casts with the sac and taken out with the cord, and if it arises where you have a lesion on the anterior of the canal or cord, it is not a very promising case. Where you have merely the meningocele or the sac itself, you have very favorable results. Some people say to take off the sac and tie it off at its base, but these things should be very carefully looked into. Where the sac has a long base, simply put the stitches through, closing the sac, and then folding it upon itself, and just using that as a sort of pad. I think that would be rather dangerous on account of some fibres of the cord being in there and causing paralysis afterwards. We have had one or two experiences. In one or two cases I think we had convulsions after that operation, lasting twenty-four to forty-eight hours, and I think in one child the convulsions lasted for a week, but in both these the children afterwards recovered and were all right. In one of these cases the child did not have a pronounced hydrocephalus, but had large fontanelles there and large protrusions. In this case there was considerable cerebro-spinal fluid escaped at the time. During the operation we elevated the hips, to keep the fluid into the canal and cerebrum as much as possible, but there was considerable escaped in this manner. I don't know whether that had anything to do with the convulsions; whether we got some portion of the cord in the stitch and produced the convulsions I don't know.

As the doctor has said, the death rate is always heavy. As to the time of operation, we have been in the habit of allowing these people to run along until they are ten or twelve months old. In one case we undertook a younger child, but the shock was so very great that the child died not long afterwards. I think the whole thing is rather serious.

DR. RALPH SPENCER, Grand Rapids.—I don't know that I can add anything in the way of surgical procedures for this very distressing deformity, except to say that I have had considerable experience in these cases, and I can recall readily seven or eight that have occurred in my practice within the last twenty years. All of the cases that I have seen have died before they were a year old. Only one of these was operated upon, and not then by my advice. The literature on the subject gave so little promise that I did not advise operation, but one of the cases fell into the hands of a surgeon and was operated upon, but not with success, as it terminated in death a short time after the operation. The cases that I have seen perhaps have not been good ones for operation, because shortly after birth hydrocephalus developed, and the other distressing symptoms that accompany hydrocephalus, and death followed, and, as I said, all within less than a year.

Every case that I have seen has been attended by club feet and a good deal of general paralysis of the lower extremities. I am pleased to have been present and heard this paper, as it gives hope and leads one to think that there are still possibilities for doing something in the way of operative procedure for these cases.

DR. MACDONALD (closing).—I have nothing further to offer, except that from a limited experience I have been led to regard this condition as not essentially an unfavorable one for operation.

The next Annual Meeting of the Michigan State Medical Society will be held in Detroit September 27-28, 1911

A CONSIDERATION OF PREGNANCY AND OF FIBROID TUMORS OF THE UTERUS*

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Let us begin this discussion with a syllogism: The sick woman consults the physician to be cured of her disorder or to ascertain its cause; the physician examines to find out the nature of the ailment that he may intelligently prescribe; from this the conclusion appears that on the diagnosis alone rests to a large extent the future of the case.

THE IMPORTANCE OF CAUTION IN DIAGNOSIS

Diagnosis is an art as much as is music or painting, and must be as assiduously cultivated, for, as with these, no matter the experience or successes achieved, there always remains yet something to be acquired. It would seem to follow, therefore, as a logical deduction, that only by the closest scrutiny and painstaking investigation of the ordinary case can one hope to arrive at expertness, and that even so, with past experience and scientific attainment at command, one is not infrequently helpless in arriving at a knowledge of the actual normal or morbid processes at hand, and therefore in the application of a reasonable treatment.

In attempting the diagnosis of pregnancy, especially during the early part of the first trimester, the physician must ever recognize the fact that the odds are against him, and that while, as stated in the books, the condition is usually easy of detection after the middle period, the unusual too frequently intrudes itself, baffling the practitioner and proving a stumbling-block even to the expert. With increasing knowledge and experience in obstetrics this fact becomes more and more evident and appreciated.

The cardinal signs and symptoms may serve in ninety-nine instances, but in the hundredth case, and always the one of most importance, may absolutely fail to shed light, so that he who pins his faith implicitly on their showing will have disappointment as his reward.

Valuable as they may be when properly interpreted, we are all inclined to be too readily influenced by the patient's statements; it certainly does not follow because a woman says, and possibly thinks, that she is pregnant she is so, or because she denies the existence of gestation that she is not with child.

Many a woman goes to the physician with malice aforethought; others, desiring the truth, consciously or unconsciously, obscure the situation with imaginary suppositions; while pseudopsyesis is not at all uncommon. After the fourth month the diagnosis of pregnancy should present no great perplexities, but during the first few weeks, even under the most favorable circumstances, the detection of utero-gestation is extremely difficult, and sometimes impossible. No one, therefore, will prejudice his reputation by frankly stating that he does not know after a first examination, and must have further opportunities

*Read before the Wayne County Medical Society, December 19, 1910.

for finding out before committing himself to absolute expression.

What I would insist on is, always when difficulties are encountered and uncertainty results from careful investigation, *that no snap diagnosis shall be made*, but that the patient be requested to return at some future date, two, three or four weeks later, for further examination, in order that present findings may be compared with future, and confirmed or otherwise.

The well-known signs of pregnancy are not infallible, especially at an early date, for all of the subjective symptoms and most of the objective signs may be wanting in a perfectly normal case, while conversely, most of the former and many of the latter may be strikingly exaggerated in the presence of an empty uterus. Physical conditions may at the beginning also render exploration enormously difficult or impossible, and the unknowledge of preceding states may mask the real development. Very thick deposits of fat in the abdominal wall and omentum, rigidity of the recti, contraction of the patient's thighs during examination, and local disorders, as subinvolution, are some of the bars to immediate diagnosis.

TRUSTWORTHY SIGNS OF EARLY PREGNANCY

There are three uterine signs of early pregnancy, however, any two of which being present, especially in conjunction with the ordinary manifestations, may be taken as of great significance.

The first of these is the broadening and impressibility of the uterine fundus, pointed out by Landau in 1890. (Berlin klin. wochenschr. 1890, No. 33; Deutsche med. wochenschr. 1893, No. 52.)

The second is the softening of a portion of the uterine wall with bulging at this particular part, so that a longitudinal groove appears to be present between the harder portion of the uterus and the projecting boss. Attention was first called to this sign by v. Braun in 1899. (Centralblatt f. Gynakologie, 1899, p. 488; Wien. klin. wochenschr. 1899, No. 10.) The softened portion of the uterine wall is supposed to represent the point at which placental development is going on.

The third is the well-known Hegar's sign, or compressibility of the isthmus. (Deutsche med. wochenschr. 1895, No. 35.)

By means of these recognizable changes in the uterine substance, pregnancy as early as the third week has been correctly diagnosed, and from the fourth week to the end of the second month these signs may be considered as almost positive. Braun v. Fernwald's sign has been confused with other conditions; within the past two months two very competent diagnosticians have told me that they had recently mistaken it for ectopic gestation.

DIAGNOSIS OF FIBROID TUMORS OF THE UTERUS

Among the conditions most frequently mistaken for pregnancy, fibroid tumors of the uterus stand pre-eminent. While as a rule these growths may be detected without much difficulty, having usually attained to considerable size before the patient presents for examination, in occasional instances the mimicry of pregnancy is so misleading as to render diagnosis impossible until the case has been for some time under observation and repeatedly examined. Small growths, also capable of giving rise to much suffering and local and reflex disturbances, are not always readily discovered, and an insignificant tumor slightly projecting into the uterine cavity has more than once proved a Waterloo to the physician.

The prevalence of these growths and their presence as complications of pregnancy render their recognition of prime importance to the obstetrician, for, during pregnancy and labor, although generally

of little moment, they may prove a serious menace, and, under certain circumstances, involve the life of both mother and child. According to Bayle, 20% of women over thirty-five years of age are possessed of fibroids, while Klob states that they are found in 40% of women who have passed the fifth decade. In 2,649 cases of uterine neoplasms noted by Roger Williams, 883, or 33%, were of this variety.

The tumor is hard, of slow growth, is usually multiple, often irregular in form, and stands out more or less sharply from the surrounding tissues. If of soft consistence, the feel is quite different from that of the pregnant womb. In large growths inspection of the abdomen shows that the upper surface of the tumor falls abruptly, while the pregnant uterus slopes off gradually into the epigastrium. To avoid error when other measures fail in establishing a diagnosis, the patient should be examined under an anesthetic, and this is especially desirable in hyperesthetic and fat women. The X-ray may also be resorted to as early as the third month. In the fibroid the fetal heart sounds, movements and Braxton Hicks' sign will of course be absent, but care must be taken not to confound voluntary contractions of the abdominal muscles, the transmitted aortic beat, and the rhythmic contractions of a soft or cystic tumor with these.

Entering into the diagnosis must also be a consideration of the age at which fibroid tumors ordinarily appear, and their relation to fecundity and sterility, both in the primipara and the multipara. It not infrequently happens that the existence of a fibroid is entirely unknown to the patient, and that the tumor is first discovered during an examination for some other disorder. In a case referred to me by Dr. Chas. W. Hoare, of Walkerville, Ont., a pedunculated subserous fibroid was found while examining an umbilical hernia. Although after removal the tumor weighed seven pounds, the patient had carried it about, quite unconscious of its existence. Instances occasionally occur in which the differential diagnosis between fibroids and pregnancy presents great difficulty, but ordinarily careful investigation should reveal the character of each in at least 98% of cases. The two following cases, which have come under my observation during the past year, well illustrate how sloppy methods may lead to uncomfortable, if not serious mistakes.

Case 1. Referred by Dr. David Inglis. First seen April 16, 1910. The patient is thirty-five years old, has been married two years, and has never been pregnant. General health always excellent. Menstruation fairly regular, every twenty-eight to thirty days, lasting three, but since marriage prolonged to five days. Formerly there was slight pain in the left iliac region during the first day of flow. She has had a good deal of frontal and occipital headache. Appetite good; digestion excellent; bowels regular.

The latter part of June, 1909, menstruation occurred normally. In July the flow was "not quite as plentiful," and lasted only two days. At this time she consulted her physician, who, after examination, pronounced her pregnant between three and four months, and set the time for her probable confinement. The August and September periods were missed, but in October she had quite a profuse flow lasting nine days, during which she was in bed most of the time. She also had severe pain in the back and at the waist line, and on the 5th of the month experienced, as she expressed it, "a great jar," which she ascribed to fetal life. This has not been repeated, to any extent, since, but there has been some "beating." In November the flow was as usual, but was checked after two days by "strong medicine," prescribed by the doc-

tor. In December and January the flow was absent, but in March she menstruated for three or four days, and again in April the discharge was "natural." From November 3d to February 17th the patient was kept in bed to avert a possible miscarriage. On Christmas day of last year she became restless at her enforced bed-stay, and insisted on getting up and taking dinner with the family. She was persuaded by the physician, however, that she would be running great risk should she do so, that she would have but a short time longer to remain quiet, and that her reward would then be ample.

In April she was seen in consultation, by a specialist in obstetrics, who confirmed the attending physician's diagnosis, but stated that the child was dead, and recommended that the patient be taken to a hospital, and the uterus emptied to obviate possible blood-poisoning.

When seen by me there were no indications of pregnancy save the fact that the patient had passed an occasional menstrual period. A vigorous appetite and lack of exercise had resulted in the formation of an enormous layer of fat in the abdominal walls, which accounted for the progressive increase in waist measurement. This part of her condition was a Simon pure example of polysarcia abdominalis, of which I wrote as long ago as 1895 (*Medical Age*, July 25, 1895).

The uterus lay toward the right, the point where she experienced the "jar," and was considerably enlarged, the fundus extending upward to about a hand's-breadth above the pubes, while the whole mass corresponded fairly to a pregnant organ at about the fourth month. A fibroid body was found extending to the left and another posteriorly, partially filling the cul-de-sac.

The breasts were small and flat, but she thinks that they were larger at first and that there was some tingling. The nipples were retracted and small. Diagnosis: Multiple fibroids of uterus. The patient was immediately allowed to go about her ordinary affairs. She has lost much of the superfluous fat, has a good color, and is feeling well and happy. In spite of the fact that she has not menstruated (to date) since early October, she has not yet miscarried, nor has she given birth to a baby at term, for I have not yet relieved her of her incubus by hysterectomy.

CASE 2. Referred by Dr. C. W. Hitchcock, October 21, 1910. Patient aged thirty-seven, married, never pregnant. Seven years ago began to have pain in her left side, which continued intermittently for three or four years. Menstruation always regular and the flow normal, until two years ago, when she began to have more pain, and noticed that the discharge was considerably increased. Any extra exertion would also bring on a flow between the periods.

At about this time, while moving a trunk, she injured herself, and called in a physician, who after an examination, pronounced her pregnant. This diagnosis was afterwards confirmed by three other physicians who were consulted at different times. One of these men boasted an obstetric experience of eighteen hundred cases. From the unanimity of opinion, the patient was led herself to believe in the pregnancy, and gradually developed the usual symptoms, although, as far as can be learned, these were not pronounced. But so well satisfied was she with her condition that she prepared a wardrobe for the prospective infant. After nine months she had some feeble pains, but these soon ceased, and the supposed pregnancy was not further heard from. When seen, the uterus was slightly enlarged and deviated to the right. Posterior to the latter was a mass the size of a cocoanut, which appeared quite dis-

tinct from the uterus, but connected with its wall, moving freely with the latter. The whole mass, uterus and tumor, was irregular in shape. Diagnosis: Subserous fibroid.

The uterus and growth were removed by hysterectomy, on November 12, 1910, the patient making a satisfactory recovery.

PREGNANCY COMPLICATED BY FIBROIDS

The diagnosis of pregnancy complicated by fibroids may present the same difficulties which are incident to either condition alone, or, in the instance of large growths, be absolutely impossible during early gestation when the tumor completely overlays and conceals the ovum. Frequently the knowledge of the previous existence of a fibroid may shed some light on the situation, and this together with the subjective symptoms, render a decision easy. In most instances the growth is so small as to prove only an incident, but again time alone will serve to make the diagnosis clear.

The complication of pregnancy with large tumors is quite uncommon. In 13,814 cases, Meheut found but 85 instances or 0.62% of this kind.

The size, situation and rapidity of growth in the tumor is of much importance. Subserous growths of the fundus and upper body and small tumors of the latter are generally of little import. If situated posteriorly, in the broad ligaments or in the cervix, and especially if adherent, they may prove of serious consequence. It must be remembered, however, that even when developed in these locations, the influences of pregnancy in drawing out and softening the growth, and thus changing it in form and consistence, may render it perfectly harmless during labor. Again, many tumors arising in the lower uterine segment and cervix, and which at the beginning of gravidity appear to offer an insurmountable obstacle to the escape of the fetal head, may even as late as the beginning termination of labor rise up into the abdominal cavity or be thus displaced by the accoucheur. Subserous or polypoid fibroids of the cervical canal may be pushed downward by the advancing head and thus open up a free passage, while growths situated higher up in the cavity may be so pressed upon and drawn out as to be extruded as foreign bodies following normal delivery. I am indebted to Dr. Charles T. Southworth, of Monroe, for an interesting specimen of the latter condition. The patient, a twenty-two years old I-para, had had diphtheria during late October and November, 1910, followed by a general infection. On December 17th she was delivered by the doctor after a normal labor, which was attended by very slight blood loss. Eight hours later pains again set in, greatly exceeding those of the labor just completed, and after eight hours a fibroid polypus the size of a goose egg was discharged. The hemorrhage during this subsequent event was inconsiderable.

The dangers from fibroids complicating pregnancy and labor, aside from the blocking of the pelvis, may be briefly set down as including: Abortion (in 30% according to Wittich), with serious or even fatal hemorrhage; feeble labor pains; placenta previa (Winckel notes a percentage of 3.4%); malpositions of the child (Olshausen found 19% of transverse presentations in this complication as against 0.6% under other conditions); mechanical difficulties from pressure on the diaphragm with attending heart complications and limited breathing space; and pressure on the abdominal and pelvic viscera, nerves, and blood vessels, giving rise to pain, hydronephrosis, edema, etc.; and finally sloughing of the fibroid with systemic septic infection.

MANAGEMENT OF COMPLICATED CASES

As to the management of these cases:—Readers of current obstetrical literature cannot but be impressed by the fact that

men of largest experience adopt an expectant attitude, and that only those obsessed by surgery rush to operative measures. In this connection the statistics of Pinard are exceedingly pertinent. In about 14,000 cases this observer met with only eighty-four complicating fibroids. Of this number, in sixty-six cases pregnancy reached a normal or nearly normal termination. In thirteen premature delivery occurred, and there were five abortions. In only four instances was intervention found necessary during pregnancy, and labor occurred spontaneously in fifty-four, while in only twenty-four was assistance required. Of the total number, sixty-five children were dismissed living.

In a personal experience now numbering several thousand cases, I can recall but three instances in which surgical intervention was resorted to. The first of these was in the practice of the elder Mulheron; a breech presentation was obstructed by a fibroid as large as an orange situated in the middle third of the cervix. This enucleated and removed, delivery was effected with difficulty on account of the excessive size of the dead child.

The second case was referred to me by Dr. Mary G. Haskins, and the complete involvement of the uterus in the fibroid growths made a hysterectomy necessary at the fifth month of pregnancy.

The third case was one of sessile fibroid referred by Dr. Wm. F. Acker, Monroe, in which successive abortions, apparently due to the growth, rendered its removal seemingly desirable.

If operative measures become imperative as a life-saving measure, these should be undertaken, when possible, near the termination of pregnancy. Myomectomy during the early months presents no particular difficulty, but carries with it the double danger of infection and abortion. Total hysterectomy is always indicated when the woman is already infected, and may be accompanied or not by Cesarean section.

32 Adams Ave. West.

SURGICAL SUGGESTIONS

Rupture of the urethra occurring between the posterior layer of the triangular ligament and the scrotum is one of the most serious accidents in surgery, and demands immediate operation.—*American Journal of Surgery.*

Overdistention of the bladder due to neurasthenia, hysteria, shock or prolonged voluntary retention may be overcome by administering a rectal enema consisting of a pint of warm water and an ounce of glycerin.—*American Journal of Surgery.*

In acute posterior gonorrhea with frequent urination and all portions of the urine cloudy, if these symptoms do not respond to irrigations of the bladder, gently massage the prostate—the expression of pus will indicate repeated massage as the treatment to be pursued.—*American Journal of Surgery.*

The passage of a sound or catheter into a tortuous or narrowed urethra is facilitated by injecting the urethra full of sterilized olive oil.—*American Journal of Surgery.*

A small swelling in the parotid region may be an inflamed lymph-node. A single focus of tuberculous lymphadenitis is sometimes to be found here.—*American Journal of Surgery.*

Prostatic massage for gonorrheal prostatitis is not limited in its usefulness to chronic cases. In *some* cases of fairly acute gonorrheal prostatitis the symptoms do not abate until daily expression of the pus by massage is undertaken, and then they subside very quickly. Such a treatment must be undertaken only upon proper indications, however; otherwise employed in acute cases it will cause mischief.—*American Journal of Surgery.*

The Journal of the Michigan State Medical Society

All communications relative to exchanges, books for review, manuscripts, advertising and subscriptions should be addressed to Wilfrid Haughey, A. M., M. D., Editor, 24 West Main Street, Battle Creek, Michigan. The Society does not hold itself responsible for opinions expressed in original papers, discussions or communications.

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FEBRUARY

EDITORIAL

Your Committee recommends, that on May first of each year the Journal of the State Society be discontinued to all subscribers and members in arrears and that such members be reported to the Secretary of the American Medical Association as "dropped for non-payment of dues."—*Report of Business Committee unanimously adopted by House of Delegates.*

MEDICAL DEFENSE

THE report made by the Chairman of the Medico-Legal Committee to the Council at its January meeting was a remarkably good one, showing that the Committee is doing its work in a creditable and satisfactory manner, and at a very small expense to the Society.

"Ten cases of malpractice have been reported to the Chairman during 1910. Two of these have been settled without trial, two were threatened prior to 1910 (one of which has been successfully defended by the doctor, and the other not heard from further), five are purely bluff cases, and only one of the ten is expected to go to trial."

The doctor has in no instance been required to pay money in settlement.

Trouble is certain to arise in cases of delinquents. Doctors by their carelessness are depriving themselves of protection. It is unfair to give the delinquent the same protection given to the man who pays promptly, hence the provision that suits threatened while a member is in arrears will not be defended. During the year just past two men were threatened with suit while in arrears beyond the limit. Fortunately for them the suits were of the bluff variety, but they came uncomfortably near being deprived of protection.

MICHIGAN STATE BOARD OF REGISTRATION IN MEDICINE

THE Legislative Committee presented to the Council at the January meeting the proposed plan for the support of the State Board of Registration in Medicine as outlined at the Bay City meeting of the State Society. This measure received the endorsement of the Council, and will be presented at Lansing.

Conditions at Lansing have changed with the new administration, and if we wish to carry this plan through, it will be necessary for every member of the Society to get out and do his utmost. He must write to his representative and senator, and must lose no opportunity to interview them. With our present primary system legislators realize that they must do the things their constituents want, but if the constituents do not state their wants they must not expect to get them.

The argument has been advanced that there is no precedent for state support of the Board, as we are asking. To determine how the various medical examining Boards are supported, the State Secretary addressed a letter to the secretary of the medical examining Board of every state and territory in the Union, and received forty-three replies. From these replies we find that the Boards in the following states are supported by fees, or fees and fines received in the carrying out of the provisions of the law, that is, the examination and licensing fees, and fines assessed:

Alabama,* Arizona, Arkansas, California, Colorado, Connecticut,* Florida,* Georgia,* Iowa, Louisiana, Maine, Maryland, Mich-

igan, Minnesota, Missouri, Montana, New Hampshire,* New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Tennessee, Texas,* Vermont, Virginia, Washington, and Wyoming.

No reply was received from the secretaries of the medical examining Boards of the following states:

District of Columbia, Indian Territory, Kentucky, New Mexico, North Carolina, Utah, West Virginia.

The other Boards are supported as follows, the quotation in each instance being taken from the letter of the secretary:

Delaware.—"If the fees are not sufficient the state will supplement them."

†Illinois.—"The work of both 'bodies' (Board of Health and Examining Board) is performed by clerks who may be paid out of the state appropriation."

Indiana.—"Our stationery and the expense of our report to the governor is taken care of by the State Printing Board."

Kansas.—"By the state."

Massachusetts.—"This Board is supported by a state appropriation made by the legislature annually."

†Mississippi.—"Supported partly by annual appropriation, (three dollars a day and actual traveling expenses), and fees, which are divided equally among the thirteen members."

†Nebraska.—"Legislature appropriated $8,200 two years ago for this department."

Nevada.—"By Legislative enactment, when our treasury is exhausted the state pays the bills."

Pennsylvania.—"The Medical Council which does the detail work in examining credentials of preliminary education, of medical education, and of good moral character, had an appropriation from the legislature for the past two years amounting to two thousand dollars."

†Rhode Island.—"The cost of these meetings, that is the traveling expenses, is met by the State Board of Health, as a health Board. The fees are placed in a fund to be used in prosecution of such cases as come to the attention of the Board, and in obtaining evidence. The money remaining is apportioned to each medical member of the Board."

South Carolina.—"This Board is supported by the state. Each member receives four dollars per diem and mileage."

South Dakota.—(Quoted from the law.) "There is hereby established a fund to be known as the Medical Board Fund, and the sum of four thousand dollars is appropriated out of the moneys in the state treasury . . . . to meet the expenses of carrying out the provisions of this act for two years."

LIFE INSURANCE EXAMINATIONS

WHEREAS, Many life insurance companies have notified their medical examiners of a reduction of the examining fee from five dollars to three dollars, and

Whereas, We, as physicians, realizing the responsibility incident to proper examination of the individual, believe such reduction to be unjust; therefore be it

Resolved, That the House of Delegates in session assembled do hereby declare such reduction to be unjust, and respectfully request that no physician legally authorized to practice medicine in Michigan, accept such reduction of fee.

Resolved, That it is the sense of the House of Delegates that hereafter in such examination for life insurance the minimum fee shall be $5.

Resolved, That the several component societies forming this State Society be requested to adopt these resolutions.

Resolved, That a copy of these resolutions be mailed to the several life insurance companies that have reduced the fee from $5 to $3.

The above resolutions were adopted unanimously by the Michigan State Medical Society in General Session, at the Jackson meeting, and were published in the August, 1906, number of the JOURNAL. Several, in fact, most of our County Societies have

***Those states marked with a star (*) divide up the money left over after the expenses are paid.**

† In the states marked with a dagger (†) the State Board of Health and the Examining Board are combined.

endorsed these resolutions, and one county in particular has been strictly enforcing them,—so strictly that when a certain insurance company sent an agent into the county recently, so we are informed, the agent found it necessary to instruct the doctors to send in their bills for the regular $5 fee. The home office of the company refused to pay the extra $2, whereupon the Councilor of the District wrote to them, receiving in reply the letter on page 94

Life insurance examinations are more than a temporary service where the service and the responsibility are soon terminated. The responsibility in this work extends through the life of the policy. These records are kept on file, and may be questioned in the courts at any time, even years after the examination is made. The doctor must, therefore, make these examinations with extreme care, looking far into the future. Nothing of this is required in the ordinary services rendered by physicians, thus nullifying the argument of the letter.

There is no question of the right of the medical men to fix the amount that they shall receive for their services. There is no insurance company in existence that would for a moment consent to insure a doctor, or any one, and let the insured fix the amount he was to pay for his insurance. We believe that the doctors in the county interested in this matter at the present time will win out if they stick together. No insurance company can do business for long without a careful and painstaking examination of its risks.

REPRINTS

THE Council at its annual meeting, January 11, decided to furnish the authors of original articles appearing in the JOURNAL with one hundred reprints free of charge, provided they are requested when the galley proofs are returned to the Editor. Those wishing more than a hundred, or covers, will be expected to pay cost for the extras, check accompanying the order, and the reprints will be delivered free of charge.

The arrangement in the past has been unsatisfactory because of sending the reprints collect, making a large express fee, and a good-sized fee for transferring the money. The new plan will undoubtedly be more convenient to all, and less expensive, but will cost the Society between two hundred fifty and three hundred dollars a year. It will be readily understood, therefore, that when extra reprints are ordered, the check to pay for them must accompany the order, thus lessening the bookkeeping, and obviating the necessity of the Society keeping an open account with dozens of its members.

When a man orders reprints, he has taken stock of his cash on hand, and feels he can afford the luxury, but when they come, about three weeks later, he may be short when the expressman arrives. We hope that all will enter into the spirit of the new order, and help to make it a success.

BOARDS OF SUPERVISORS

It is reported that the Boards of Supervisors of Michigan are working for the repeal of the provision of the State Constitution allowing appeal to the Circuit Court in matters of disallowance of claims by Boards of Supervisors. Until a year ago we had no appeal. Physicians are vitally interested and will undoubtedly oppose this measure.

IN MEMORIAM

Dr. George W. More, of Ionia, a graduate of the University of Michigan Department of Medicine and Surgery, 1906, died in October, at his home, of typhoid fever. The doctor was a young man of about twenty-eight years, and leaves, besides his immediate family, an affianced bride.

MINUTES OF THE MEETING OF THE COUNCIL, MICHIGAN STATE MEDICAL SOCIETY

January 11, 1911.

The annual January meeting of the Council of the Michigan State Medical Society was called to order by Vice-Chairman Bulson in the Post Tavern, Battle Creek, at 10.30 A. M., January 11, 1911.

Present: Councilors Bulson, Biddle, Haughey, Rockwell, Spencer, Kay, Seeley, Ennis, and President Burr, Secretary Haughey and Treasurer Inch of the State Society. Owing to the delayed arrival of the train, Chairman Dodge and Councilor McMullen were a few minutes late, but on arrival Councilor Dodge was given the Chair.

The minutes of the previous session were read by the Secretary, and on motion of Councilor Bulson were accepted and adopted.

The Report of the State Secretary and Editor, presented by Secretary Wilfrid Haughey, was received, and so much of it as related to Finance was referred to the Finance Committee, so much of it as related to publication to the Publication Committee, and so much as related to County Societies to the Committee on County Societies.

Councilor Bulson was requested by the Chair to act on the Finance Committee.

The Report of Treasurer Geo. F. Inch was received and referred to the Finance Committee.

The Committee on Legislation and Public Policy by Dr. Walter H. Sawyer, Chairman, presented draft of bill to secure State support for the Board of Registration in Medicine.

The matter was discussed at length, and it was moved by Councilor Spencer that the Report of the Legislative Committee be adopted and the bill as presented be approved by the Council.

Supported by Councilor Rockwell and carried.

The Report of the Medico-Legal Committee was read by the Chairman, Dr. F. B. Tibbals. Report was received and referred to the Committee on Finance.

RECESS WAS TAKEN FOR LUNCH

After recess the Council was called to order by Chairman Dodge.

Present: Councilors Dodge, Biddle, Bulson, Haughey, Rockwell, Spencer, Kay, Seeley, McMullen, Ennis, President Burr, Secretary-Editor Wilfrid Haughey, Treasurer Inch.

Report of Finance Committee, Dr. B. H. McMullen, Chairman.

Your Committee report that they have examined the books and vouchers of the Secretary and Treasurer and find them correct.

Your Committee recommend that all industrial bonds now held by the State Society be disposed of as soon as such disposition can be made at par, or without loss to the Society. Your Committee further recommend that future purchases of bonds be of good municipal bonds of the variety which cover the entire taxation of the municipality, and that all surplus money over and above a good working capital be so invested. All bonds to be approved by the Chairman of the Council.

All of which is respectfully submitted.

Councilor Biddle moved that the report of the Committee be accepted and the recommendations adopted. Supported by Councilor Kay and carried.

Report of Publication Committee, Dr. A. P. Biddle, Chairman:

"Your Committee believe that it would be for the best interests of all to state to every writer of a paper that he will be entitled, if he so desires, to one hundred reprints of his paper free, and as many more as he will care to pay for at a rate sufficient to cover cost of printing and express charges, and that the express charges on the same be prepaid by the State Society.

"We believe it will be better for the Society as a whole to continue the reporting of discussions, even at the expense quoted by the Secretary-Editor.

"All of which is respectfully submitted."

Councilor Ennis moved that the report be accepted and adopted. Supported by Councilor Haughey and carried.

Report of Committee on County Societies, Dr. W. H. Haughey, Chairman:

"We recommend that in case a County Society is falling behind and losing interest, the Councilor of the District to which the County Society belongs

may be privileged, if in his judgment it seem wise to do so, to invite the Secretary of the State Society and some member prominent in the profession to make a visit with him to that Society, with the hope of rejuvenating it, and that their expenses be paid by the State Society.

"We recommend that the visits of the Secretary-Editor around the State to the different County Society and District Meetings be continued. We think good has come from these visits, and we urge that during the coming year new territory be covered when possible.

"All of which is respectfully submitted."

Moved by Councilor McMullen that the report be accepted and the recommendations adopted. Supported by Councilor Biddle and carried.

The Secretary-Editor presented a communication from the Association of American Medical Colleges requesting the President of the State Society to appoint a delegate to their Association Meeting in February.

Moved by Councilor Biddle that the President of the State Society be given authority to appoint such a delegate. Supported by Councilor Rockwell and carried.

President Burr announced the appointment of Dr. W. T. Dodge, Chairman of the Council, as a delegate to the Convention of the Association of American Medical Colleges, and requested the State Secretary to make out the proper credentials and present them to Dr. Dodge.

A letter was read from Councilor Baker stating his inability to be present at this meeting and enclosing a suggested amendment to the By-Laws regarding the nomination and appointment of Honorary Members to the State Society.

A letter was also read from Dr. H. B. Landon, Bay City, enclosing $3.50 for his dues for 1910 and 1911, also his resignation as a member of the State Society, and regretting the misunderstanding which led to his being refused Honorary Membership in 1910.

Moved by Councilor Haughey that we accept the dues forwarded by Dr. Landon for 1910 and 1911, that the Secretary be instructed to make the entries on the books of the State Society, that the Doctor be urged to withdraw this resignation, and that his name be recommended to the House of Delegates for Honorary Membership.

Supported by Councilor Spencer and carried.

Moved by Councilor Haughey that the State Secretary be instructed to correspond with the other two gentlemen whose Honorary Membership was refused at the meeting in Bay City, and if he can get their co-operation in paying up back dues as Dr. Landon has done, that we also recommend them to Honorary Membership.

Supported by Councilor Biddle and carried.

Moved by Councilor Bulson that Dr. Wilfrid Haughey be re-elected Secretary-Editor for the ensuing year. Supported by Councilor Seeley and carried.

Moved by Councilor Biddle that Dr. Geo. F. Inch be re-elected Treasurer for the ensuing year. Supported by Councilor Haughey and carried.

Moved by Councilor Biddle that Dr. F. B. Tibbals be re-elected Chairman of the Medico-Legal Committee for the ensuing year. Supported by Councilor Rockwell and carried.

Moved by Councilor Biddle that Dr. J. Flinterman, of Detroit, be re-elected member of the Medico-Legal Committee for a term of five years. Supported by Councilor Rockwell and carried.

Moved by Councilor Biddle that the President of the State Society be furnished with such stationery as he may approve. Supported by Councilor Haughey and carried.

A communication was read from the Association of State Secretaries and editors, requesting that the expenses of Secretaries of State Societies to the Annual Meeting of that Association be paid by the State Societies.

Moved by Councilor Biddle that this matter be laid on the table for one year. Supported and carried.

Moved by Councilor McMullen that the bond of the Treasurer be fixed at $4,000. Supported by Councilor Biddle and carried.

Moved by Councilor Biddle that the State Secretary be authorized to purchase a typewriter. Supported and carried.

Councilor Ennis extended an invitation to the entire Council to attend the meeting of the Delta County Medical Society in August.

Moved by Councilor Bulson that hereafter, at the meetings of the State Society, the first meeting of the Council occur the evening before the first day's session and the first meeting of the House of Delegates the morning of the first day's session.

Supported by Councilor McMullen and carried.

Moved by Councilor Rockwell that the next Annual Meeting of the Council be held in Battle Creek. Supported by several and carried.

Wednesday and Thursday, September 27 and 28, 1911, were fixed by the Council as the time for meeting of the State Society.

On motion the Council adjourned to meet in Detroit in the evening of September 26, 1911.

W. H. HAUGHEY, M. D., *Secretary of Council.*

COUNTY SOCIETY NEWS

NORTHERN TRI-STATE MEDICAL ASSOCIATION

The thirty-seventh annual meeting occurred January 10, 1911, in Kalamazoo, as the guests of the Kalamazoo Academy of Medicine. There were about two hundred seventy-five in attendance and a rousing good time is reported. The program follows:

Ehrlich's Hyperideal, Dr. R. C. Shranklin, South Bend.

The Influence of Glandular Pharyngeal Tonsil (Waldeyer's Ring) in the Causation of Rheumatism and Endocarditis, Dr. B. R. Shurley, Detroit.

Prostatectomy by the Method of Goldsmidt, Dr. Charles M. Harpster, Toledo.

The Diagnosis of Intestinal Perforation in Typhoid Fever, Dr. Sidney D. Foster, Toledo.

Some Clinical Aspects of Achlorhydria, Dr. Albion W. Hewlett, Ann Arbor.

The Physician as a Business Man, Dr. W. F. Shumaker, Butler.

Some Clinical Aspects of Acute Infantile Paralysis, Dr. Joseph A. Capps, Chicago.

Goiter, Dr. Charles H. Mayo. (Dr. Mayo being ill, Prof. L. B. Wilson substituted for him.)

The Family Tendency to Disease, Dr. Archibald Church, Chicago.

BERRIEN

The Berrien County Medical Society chose to hold its annual meeting in December this year instead of in January, 1911. Accordingly on the 15th the meeting was held in Benton Harbor, and the following officers elected for the ensuing year: *President*, Dr. H. C. Hill, Benton Harbor; *First Vice-President*, Dr. L. A. King, Baroda; *Second Vice-President*, Dr. C. M. Merritt, St. Joseph; *Secretary*, Dr. E. J. Witt, St. Joseph; *Treasurer*, Dr. N. A. Herring, Benton Harbor; *Member Medico-Legal Committee*, Dr. W. L. Wilson, St. Joseph; *Delegate*, C. N. Sowers, Benton Harbor, Alternate, J. D. Greenamyer, Niles.

Dr. Bayard Holmes, of Chicago, gave a most interesting lecture on "How the Technique and Duration of Mastoidectomy, Cholecystostomy, Appendectomy, and Cystostomy affect the Indications for Immediate Operation." The paper and discussion consumed most of the afternoon, and was most interesting and instructive to all. The paper will be published in an early number of the JOURNAL.

Dr. Holmes was by unanimous vote made an honorary member of the Society.

After the meeting proper, an informal dinner was held at Hotel Benton, at which a large number attended. After the dinner Dr. E. J. Witt gave a talk on "What I Saw and Learned During a Visit to Mayo Brothers Clinic."

The meeting concluded at 9.30 P. M., and was one of the most interesting in the history of the Society.

C. N. SOWERS, *Secretary.*

GENESEE

The Genesee County Medical Society held a special meeting, a banquet, on December 20, in honor of Dr. C. B. Burr, a member of the Genesee County Medical Society, and President of the Michigan State Medical Society. The banquet was an elaborate affair, attended by over forty members of the County Society and several guests. Toasts were responded to by Drs. Homer E. Clark, H. E. Randall, Noah Bates, J. G. R. Manwaring, J. G. Wilson, and A. S. Wheelock, of the Genesee County Medical Society, Drs. C. W. Hitchcock and H. W. Longyear, of Detroit, Dr. E. A. Christian, of Pontiac, and Dr. Wilfrid Haughey, of Battle Creek. Letters of congratulation were read from many of Dr. Burr's former associates, and friends who were prevented from attending on account of distance.

C. P. CLARK, *Secretary.*

GRAND TRAVERSE

Regular meeting of Grand Traverse-Leelanaw County Medical Society was held January 3, 1911, in Dr. Thurtell's office. Twelve members were present, also Dr. Torrence, of Hamilton, Ohio. Minutes of last meeting were read and approved.

Dr. J. M. Wilhelm was elected as delegate to the State Convention. Dr. R. E. Wells was elected alternate. Dr. J. B. Martin was elected as the County Member of the Medico-Legal

Committee. A committee was appointed to arrange for the district meeting in April.

Dr. J. M. Wilhelm read a paper on "Medication and Feeding in Typhoid Fever."

Dr. O. Chase read a paper on the "Pathology of Typhoid Fever."

Dr. Holliday read a paper on the "Complications of Typhoid Fever."

All the papers were followed by a general discussion. Dr. Torrence spoke of the methods used in the hospital at Hamilton, Ohio, and discussed some very interesting cases which he had seen. One case he mentioned was one of typhoid fever in which three relapses had occurred, the temperature curve in all three being just the same and the rose spots appearing in the relapses.

The Society adjourned to meet next month in Dr. Minor's office.

R. E. WELLS, *Secretary.*

HOUGHTON

The annual meeting of the Houghton County Medical Society was held at the Douglas House, Houghton, January 2, 1911. On account of a very severe storm, the attendance was small, but after some discussion of the financial condition of the State Board of Registration in Medicine, the annual election of officers was taken up.

Dr. A. F. Fischer, of Hubbell, was elected President, and Dr. W. H. Dodge, of Hancock, Vice-President. The election of a Secretary-treasurer aroused some discussion, owing to the fact that the retiring President, Dr. John MacRae, and some others, were strongly in favor of a second term for the Secretary. Dr. L. A. Farnham was finally elected for a second term. Dr. H. M. Joy, of Calumet, was elected to the Board of Censors, Dr. John MacRae was elected delegate to the State Society, and Dr. W. H. Matchette, of Hancock, alternate.

The report of the Secretary-treasurer for the year was read, showing the membership to be sixty-one, the same as last year, the addition of seven new members being balanced by the removal or transfer of an equal number. The financial report showed a balance in the treasury of $159.55.

After adjournment a luncheon was served.

L. A. FARNHAM, *Secretary.*

HURON

The Huron County Medical Society held its regular quarterly meeting at Bad Axe, Monday, January 16. Dr. W. J. Herrington read a paper on "Comments on Last Year's Surgical Work in the Hubbard Memorial Hospital." Dr. F. W. Sellars, of Pinnebog, gave an extemporaneous talk on "Some Peculiar Surgical Cases." Dr. C. B. Morden, of Bad Axe, related a few incidents from his recent visit to Edinburgh and London. He stated that as far as he could see, America is taking the lead in surgery, and that in internal medicine this country is on an equal plane with Europe; the British physicians and surgeons, however, have their anatomy at the ends of their fingers, figuratively speaking.

D. CONROY, *Secretary.*

KENT

At the annual meeting of the Kent County Medical Society the following officers were elected for the coming year: Dr. D. Emmett Welsh, *President*; Dr. J. D. Brook, *Vice-President*; Dr. A. Verne Wenger, *Treasurer*; Dr. F. C. Warnshuis, *Secretary.*

The delegates to the State Society are: Dr. W. J. DuBois, Dr. J. D. Brook, Dr. J. M. DeKraker.

The representative of the Medical Defense League, Dr. G. L. McBride.

F. C. WARNSHUIS, *Secretary.*

LAPEER

The Lapeer County Medical Society met at the Cleveland House, Imlay City, January 12, seven members of the Society being present. Sickness and the conditions of the roads account for the small attendance. Drs. C. B. Burr and H. E. Randall, of Flint, and G. W. Ross, of Capac, were present as guests of the Society.

At the business meeting it was decided to hold the meetings on the second Tuesday of January, April, July and October, instead of the second Wednesday.

Dr. C. B. Burr read a paper entitled, "Some Hints as to Diagnosis in Mental Cases." This paper was a masterly rendition of the various symptoms and conditions to be found in incipient cases of insanity. Dr. John S. Caulkins was to have given a paper on "Who First Discovered the Circulation of the Blood?" and Dr. J. O. Thomas one on "Eclampsia," but both were unable to be present.

After spending a pleasant afternoon together, the Society adjourned to meet Tuesday, April 11. at North Branch.

C. A. WISNER, *Secretary.*

OTTAWA

The annual banquet of the Ottawa County Medical Society was held at the Hotel Holland,

December 13th, at 7.30 P. M. A large number were present. Dr. C. P. Brown, of Spring Lake, acted as toastmaster, and the following responded to toasts: Dr. R. H. Spencer, Grand Rapids, "Theories of Heredity;" Dr. N. H. Kassabian, Coopersville, "Just a Word," and "Now and Then;" Dr. T. G. Huizenga, Zeeland, "Some Impressions of Europe;" Dr. R. J. Walker, Saugatuck, "Our Children."

On the afternoon of December 20th the members of the Society were the guests of Dr. E. Hofma, of Grand Haven. After an inspection of the new bank, of which Dr. Hofma is President, the Society was entertained at his home, where Mrs. Hofma served refreshments. The balance of the time was spent in listening to Dr. Brown's description of his "Travels in the Orient."

The January meeting was not called, because of lack of program, but the February meeting will be held the second Tuesday of the month, at the usual time and place.

GEO. H. THOMAS, *Secretary.*

SANILAC

The annual meeting of the Sanilac County Medical Society was held at the court-house Monday, December 19, and on account of the stormy weather a small attendance was recorded. The only business transacted was the election of officers for the ensuing year, as follows: *President*, G. B. Tweedie, Sandusky; *Vice-President*, J. E. Campbell, Brown City; *Secretary-treasurer*, J. W. Scott, Sandusky; *Delegate to State Convention at Detroit*, C. G. Robertson, Sandusky, Alternate, G. R. Smith, Carsonville.

J. W. SCOTT, *Secretary.*

ST. CLAIR

The annual meeting of the St. Clair County Medical Society was held December 8, 1910, at the Hotel Herrington. The following officers were elected: *President*, Dr. T. F. Heavenrich, Port Huron; *Vice-President*, Dr. G. H. Morris, Port Huron; *Secretary and Treasurer*, Dr. R. K. Wheeler, Port Huron; *Delegate*, Dr. C. C. Clancy, Port Huron, Alternate, Dr. T. E. DeGurse, Marine City.

R. K. WHEELER, *Secretary.*

SHIAWASSEE

The annual meeting of Shiawassee County Medical Society was held Tuesday, December 6. At this meeting the following officers were elected for the ensuing year: *President*, A. L. Bailey, Chesaning; *Vice-President*, Geo B. Sackrider, Henderson; *Secretary* and *Treasurer*, H. A. Hume, Owosso; *Delegate to State Society Meeting*, N. T. Parker, Corunna, Alternate, Dr. Eldred, Chesaning.

H. A. HUME, *Secretary.*

WAYNE

At the December 12th meeting Dr. Max Ballin read a paper on the prevention and treatment of post-operative hernia.

He first spoke of the prevention of hernia by proper technique at the time of operation. He said: Skin should always be divided with the knife. Scissors are all right for fascia and peritoneum, but should not be used on skin. Muscle should be split with a blunt instrument, so as not to injure blood vessels or nerves. The wound should be protected from contact with intestines, especially if an inflammatory condition exists. (Avoid wall abscess.)

In closing the abdominal wall the layer suture should be the rule.

For the fascia, a running stitch of chromicized catgut should be used, and the edges of the fascia should overlap. To relieve pressure on the layer sutures in large incisions, use two or three deep silkworm gut sutures. These should penetrate the fascia and muscle but not the peritoneum. They are tied over small suture pillows and left in place from twelve to fourteen days.

An important factor in bringing about good healing and in preventing post-operative hernia is the use of the proper amount of care in making the abdominal incision. Three points should be remembered. First, muscles should be injured as little as possible; second, the nerve supply to muscles should not be disturbed; and, third, blood vessels should not be injured. Besides this it is well to remember that incisions through fascia and muscle seem to give better scars than incisions through fascia alone; for instance, through the linea alba or linea semilunaris. Therefore, incisions that are made in the median line, or over the outer border of the rectus muscle, should be so made that they will open the sheath of the rectus muscle rather than pierce these white fibrous structures alone.

Pfannensteihls incision gives excellent results as to scar, but should not be used for suppurative cases or for very large incisions.

The methods so far mentioned apply to aseptic cases. However, post-operative hernia is more frequent in suppurative cases, i. e. cases where

drainage is necessary, and for these special rules have to be laid down. A good many of these cases could be prevented if we would adhere to the golden rule, to operate early for appendicitis, i. e. before pus is present or in the intervals of attacks. Early operation guarantees a good scar and a strong wall. If drainage is required, I have found it a very good rule not to drain through the main incision, but through a special stab wound. For instance, in pus tubes we operate through a longitudinal median incision; the pus sacs are removed, great care being taken not to infect the wound wall by spilling the pus. Same is protected by pads. Then, if drainage is deemed necessary, a hand is introduced through the incision toward the internal inguinal ring, pushing the abdominal wall outward. Under the guidance of the hand the stab incision is made through skin and fascia. Strong forceps are next pushed through the peritoneum. These grasp whatever is decided on for drainage. After one end of the drainage material is pulled up through the stab wound, the other end through the median incision can be arranged and placed wherever it is most needed. In our early cases we used two stab wounds for drainage, but one seems sufficient. It is astonishing how with this method a big median incision will usually heal by first intention. The stab wound heals in about three weeks. Of ten cases of post-operative hernia seen in the last two years, nine were caused by draining through the median incision. The reason for this is clear. If we drain through the lower angle of the main incision, the constant discharge is bound to infect the whole wound. Whereas by draining through a special stab wound, the main incision is kept clean. We dress these wounds so that the dressing of the median incision is not changed for a week, while dressings on the stab wound are changed daily.

Stab wound drainage is preferable to drainage through the posterior cul-de-sac.

In the cure of post-operative hernias we use mainly a transverse incision. Surrounding the protrusion, all adipose tissue is removed, so that the tough fascia is denuded all around the hernia for at least two inches. The hernia sac is opened and cut off. If omental or intestinal adhesions are present, they are freed and the peritoneum is then closed. The fascia is split around the ring so that we get an elliptical transverse wound. If the recti muscles present themselves and can be easily drawn together, they are united with a few catgut sutures. If the gap in the muscle is too large, it is left alone. The elliptical fascia opening is now drawn together. The edges are made to overlap, and held in that position by mattress sutures. Deep silkworm gut stitches unite the skin.

On Monday, December 19th, the last meeting for the year 1910 was held. The paper of the evening, on "Pregnancy and Fibroid Tumors of the Uterus," was read by W. P. Manton (see page 78).

Dr. B. D. Harison referred to the sluggish and reluctant manner in which the prosecuting attorney attacks persons violating the "Medical Act." He said, that it is always with the greatest difficulty that the "Board" is able to obtain prosecution against offenders of this act. He asked the Society to take some action, and if possible compel the prosecuting attorney to act more promptly in these cases.

On motion of Dr. Freund the matter was referred to the Board of Directors for action.

A vote of thanks was given to Harold Wilson for his gift of seven bound volumes to the library.

MEETING MONDAY, JANUARY 9TH

The first paper of the evening was on "The Surgical Aspect of Goiter with Special Reference to Pressure Symptoms," by Alexander W. Blain.

Dr. Blain called attention to the general interest taken by the physiologist, the internist, and the surgeon in the thyroid gland. Our knowledge of the function of the thyroid and parathyroids is as yet very limited. Their importance in maintaining metabolism has, however, been proved conclusively. The capsule of the gland is so formed that it binds the thyroid with the trachea and oesophagus.

The classification of diseases of the thyroid is difficult. From the standpoint of treatment the author made four divisions: (1) Those requiring no treatment; (2) the cases which respond to medical treatment; (3) the cases in which medical treatment has failed and surgical measures have to be instituted; (4) the purely surgical cases. The author's paper dealt mainly with the fourth division (the cases of Graves coming in the 2d and 3d).

The author considers Theodore Kocher, of Berne, Switzerland, the father of modern thyroid surgery. Charles Mayo has done most to advance thyroid surgery in this country.

Before Kocher's work, goiter patients were only operated on as a last resort. The primary mortality was high, and the end results often

disastrous. Thyroid surgery is now safe and the results most gratifying.

The location of enlargements of, or tumors within, the gland alters the symptoms. Goiters develop in the line of least resistance. The rings of the trachea are often destroyed by continued pressure.

"Goiter-heart" (aside from hyperthyroidism) is produced by continued pressure on the blood vessels, causing dilatation and cardiac degeneration and obstruction to the trachea. The large nerve trunks at times become paretic from pressure.

The technique of operation was discussed. Ether is the preferred anesthetic. Cases diagnosed as carcinoma are not amenable to treatment. All tumors should be removed as a prophylactic for carcinoma, which generally develops in the struma.

The second paper of the evening on Hyperthyroidism, with especial reference to Diagnosis and Surgical Treatment, was read by C. D. Brooks

R. C. ANDRIES, *Correspondent.*

NEWS

Dr. George C. Chene, Gas Office Building, Detroit, announces that after January 1, 1911, he will limit his practice to the Diagnostic and Therapeutic use of the X-ray exclusively.

The following Recess appointments of the Governor have been confirmed by the Senate at Lansing: Dr. Arthur W. Scidmore, Three Rivers, to the Nurses Board; Dr. W. R. Hinsdale, Ann Arbor, to the State Sanatorium Board; Dr. Bret Nottingham, Lansing, to the State Board of Registration in Medicine; Mr. Geo. S. Harrington, Kalamazoo, undertaker, to the State Board of Health.

The above are appointments of Governor Warner.

Dr. J. B. Kennedy, of Detroit, was named by Governor Osborn in place of Dr. Geo. E. Potter, for the Detroit Board of Health, and was confirmed.

Dr. J. J. Merson, of Holland, has been confined to his home by illness for some time.

The National Confederation of State Medical Examining and Licensing Boards will hold its Twenty-first Annual Meeting in Chicago, Ill., on Tuesday, February 28, 1911, at Congress Hotel.

The subjects to be taken up at this meeting will be a consideration of the State Control of Medical Colleges; a report by a special committee on Clinical Instruction; a report on a proposed Materia Medica List by a special committee; the report on a paper presented at the St. Louis meeting by Mr. Abraham Flexner of The Carnegie Foundation for the Advancement of Teaching; and some special papers on such subjects as the Regulation of Medical Colleges, Necessity for Establishing a Rational Curriculum for the Medical Degree, and others, by men eminently qualified to prepare papers upon such subjects.

These topics are all of practical and vital interest to medical colleges, medical examining boards, the profession at large and the public. The Symposium will be composed of ten papers, and be presented from the view-points of state, law, *medical colleges, state medical examining and licensing boards and the medical profession.* The contributors of papers to the Symposium on State Control of Medical Colleges are men of the highest attainments in matters pertaining to state, law and the medical profession, and their production will be worthy of the most careful consideration. The chief object of the Symposium is to determine, as far as possible, the feasibility of placing medical colleges under State control. The special committee on Materia Medica made a report at the St. Louis meeting of the Confederation June 6, 1910, and it was continued and instructed to report again at the next annual meeting of the Confederation in 1911.

An earnest and cordial invitation to this meeting is extended to all members of State Medical Examining and Licensing Boards, teachers in medical schools, colleges and universities, delegates to the association of American Medical Colleges, to the Council on Medical Education of the A. M. A., and to all others interested in securing the best results in medical education.

The officers of the Confederation are Pres. C. Guernsey, M. D., 1923 Chestnut St., Philadelphia, Pa., Secretary-Treasurer George H. Matson, M. D., State House, Columbus, Ohio.

The next annual meeting of the Association of American Medical Colleges will be held in Chicago February 27, 28, 1911, at the Congress Hotel.

Inasmuch as the questions which will come up for discussion at this meeting are of interest primarily to physicians generally, every medical organization in the country has been asked to send a delegate.

(Dr. W. T. Dodge, of Big Rapids, has been appointed by President Burr as delegate to this meeting, and to the meeting of the Council on Medical Education which meets two days later.)

COMMUNICATIONS

Sun Life Assurance Company of Canada,
Chief Office, Montreal.

MONTREAL, January 3, 1911.

Councilor the Michigan State Medical Society,
—. —. ——, ESQ., M. D.,
——, Mich.

Dear Sir—I duly received your favor of December 15th last, and refrained from replying to same until such time as we had made inquiry from our representatives regarding the state of affairs mentioned by you.

I would like to say at the outset that our superintendent distinctly states that our local agent never did agree to pay the $5 fee, and, further, never said to send the account to the company and same would be paid. Had he done so I would have been surprised, for he would have had no authority whatever to make arrangements for what fee should be paid for examinations. The fee that we have been paying in the past, viz., $3 for examinations on each application from $1,000 to $3,000, and after that $5, we consider is a just one, and should be ample for the services rendered. Our own chief medical examiner here is not paid more than these fees, and is quite satisfied with them. If the medical men would consider for a moment, they would at once see that the fee of $3 paid by insurance companies is more in proportion than they would receive from an ordinary patient for like services rendered. Furthermore, the doctor is always sure that the fee will be paid, which is not the case in private practice. Then again, the doctor is practically under a yearly contract with the company, and such being the case, instead of increasing the fees there should be a tendency to decrease them, instead of which the doctors are practically using an advantage in combining and refusing to make examinations unless an arbitrary fee is paid. We do not feel that we should have to pay the increased fee, and shall endeavor to make arrangements upon the old basis. I trust, however, that your Association will not hold out, as they propose to do, but will meet us on a fair and equitable basis as I have already outlined.

Yours faithfully,
JAMES R. WRIGHT, *Office Manager.*

DENVER, January 9, 1911.

TO THE EDITOR:

I have read with much interest the recent discussion in your columns on the subject of coccygodynia. Before proceeding to such a violent measure as extirpation of the coccyx, I should recommend to your readers that they first try the value of passive motion and massage. If one or two fingers be inserted into the vagina or rectum, and the thumb be placed on the dorsal aspect of the coccyx, the bone may be manipulated between them. The manipulations should be begun gently, and should gradually be increased in vigor. The main object should be to limber the line up in the antero-posterior plane. As a rule two or three treatments will suffice a cure.

Yours truly,
LEONARD W. ELY.

BOOK NOTICES

An Anatomical and Surgical Study of Fractures of the Elbow. By Astley P. C. Ashhurst. M. D., of the Medical Department, University of Pennsylvania. Imperial octavo, 163 pages, with 150 illustrations. Cloth, $2.75 net. Lea & Febiger, Philadelphia and New York, 1910.

This book contains the Samuel D. Gross Prize Essay for 1910, together with the illustrative histories of the fifty-six cases on which the article is based. Without doubt this is the best exposition of the subject extant. No such results have ever been attained where the diagnosis and end result have been proved and verified by use of the X-ray. Nearly every case is illustrated by at least one skiagraph. Cases 5, 21, 30, 47, 48, and 49 have two each. Cases 18, 32, 42, and 52, have three. Case 24 has four. Case 11 has five, while case 28 requires seven to fully illustrate all the author desires to bring out.

The classification used is so distinct, the anatomical relations are made so clear, the diagnosis is so plain, the treatment is so rational, and the end results are so satisfactory, as to mark a distinctive era in our knowledge of fractures of the lower end of this bone. No doctor can afford to be without this knowledge. No patient should henceforth be deprived of it.

The Physician's Pocket Account Book. By J. J. Taylor, M. D., 212 pages. Leather. Price $1.00 postpaid. J. J. Taylor, publisher, 4105 Walnut St., Philadelphia, Pa.

This book has some easy and practical directions for billing and collecting, some excellent business and legal hints, some valuable forms for emergency use, such as "dying declarations,"

"form for wills," etc., an average medical and surgical fee bill, besides miscellaneous tables, clinical directions, etc. Having a good cash account department and various clinical records,—vaccinations, deaths and confinements,—it forms a complete year-book for the physician's pocket.

The Practitioner's Visiting List for 1911. An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, postpaid, to any address, $1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

This is a very handy little pocket visit and day book, and contains many useful notes, tables, doses, etc.

The Prevention of Sexual Diseases. By Victor G. Vecki, M. D., with Introduction by William J. Robinson, M. D. Price, $1.50. Critic and Guide Co., New York.

Dr. Vecki has made a careful study of the whole question of venereal disease, its prevalence and prevention, and advocates certain procedures. To any one interested in the subject it would be a valuable book. All the more prominent plans for the suppression of venereal disease are mentioned, and the plan of the Detroit Health Board as reported by Dr. Kiefer is quoted at length. The book is very interesting and contains things which all doctors should know.

Progressive Medicine. A Quarterly Digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by Hobart Amory Hare, M. D., assisted by Leighton F. Appleman, M. D. Volume IV, December, 1910. Lea & Febiger, Philadelphia and New York. $6.00 per year.

This volume is fully up to the standard always maintained by this quarterly. It is devoted to diseases of the digestive tract and allied organs, the liver, pancreas, and peritoneum, by Wm. T. Belfield; diseases of the kidneys, by John Rose Bradford; surgery of the extremities, shock, anesthesia, infections, fractures, dislocations, and tumors, by John C. Bloodgood; genito-urinary diseases, by Wm. T. Belfield; and a practical therapeutic referendum by H. R. M. Landis. The illustrations are exceptionally good.

International Clinics. A Quarterly of illustrated clinical lectures and especially prepared original articles, edited by Henry W. Cattell, A. M., M. D. Volume IV, Twentieth Series, 1910. Philadelphia and London: J. B. Lippincott Company.

In the space at our disposal it would be impossible to mention all the divisions of the subject of medicine and surgery covered by this volume, or even to give a list of the authorities taking part in the work. In view of the action of the Ophthalmological Section at the last meeting of the American Medical Association, the article in the present number of this always useful and practical work by Zantmeyer, of Philadelphia, on Refracting for the General Practitioner, is worthy of mention. The article by James J. Walsh on Physicians' Fees Down the Ages, is well worth reading. It shows that the purchasing power of the physician's fee has steadily decreased.

Hydrotherapy: a Treatise on Hydrotherapy in General its Application to Special Affections, the Technic or Processes Employed, and Use of Waters Internally. By Guy Hinsdale, A. M., M. D., Lecturer on Climatology, Medico-Chirurgical College of Philadelphia. Octavo of 466 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1910. Cloth, $3.50 net.

The above-mentioned book is timely, well written, on a live subject, and thoroughly practical. Hydrotherapeutics are being more and more used each year. The technique is better understood and less dreaded by the profession, and its later works like the above will not only familiarize us with hydrotherapy, but will teach us its uses and virtues. Under General Hydrotherapy the physiological action on the respiration, heart, and blood is thoroughly discussed and scientifically explained. Under Special Hydrotherapy the technique of its application is carefully and painstakingly given for the various and numerous diseases and conditions for which it is employed. This technique is clearly brought out in the text and the multitude of illustrative engravings that adorn the work. The subject of Mineral Baths and the internal use of mineral water receives honest attention, their indications and use being carefully and scientifically explained.

The final chapters embrace prescription writing for hydrotherapeutic treatment, including the kinds of treatment, temperature of water, length of time for treatment to be employed, etc.

The Appendix gives many plans and valuable touches about hydrotherapy, which explains the growth, emphasizes the value, and clears up many false ideas and superstitions.

This is a decidedly valuable and practical work.

A Manual of Diseases of the Nose, Throat, and Ear. By E. Baldwin Gleason, M. D., Professor of Otology at the Medico-Chirurgical College, Philadelphia. Second revised edition. 12mo of 563 pages, profusely illustrated. Philadelphia and London; W. B. Saunders Company, 1910. Flexible leather, $2.50 net.

This is a valuable handbook of the Diseases of the Ear, Nose and Throat, containing the very latest information and in a concise and usable

form. The style is clear, and no unnecessary words are used. The book is particularly valuable to the general practitioner who occasionally has to treat these conditions.

Internal Secretions from a Physiological and Therapeutic Standpoint. By Isaac Ott, A. M., M. D. E. D. Vogel, Bookseller, Easton, Pa., 1910. Price, $1.00 bound in paper.

This little volume of a hundred and thirty pages contains three lectures delivered to the students of the Medico-Chirurgical College of Philadelphia, and is presented in this form owing to the many requests for the subject-matter of the lectures. Our knowledge of the internal secretions is in the formative period, and this volume is a distinct addition.

The Practical Medicine Series. Comprising Ten Volumes of the Year's Progress in Medicine and Surgery. Under the general editorial charge of Gustavus P. Head and Charles L. Mix. Volume IX, Skin and Venereal Diseases and Miscellaneous Topics. Edited by W. L. Baum, M. D., and Harold N. Moyer. Chicago: The Year Book Publishers. Price net $1.25.

This book, like the whole series of which it is a part, treats of the advances to be especially noted in the domain of skin and venereal diseases, besides several miscellaneous topics, and treats these things in a manner suited to the general practitioner, for whom the series is especially intended. The section on miscellaneous topics contains a discussion of medico-legal topics, the State control of the practice of medicine, vivisection, and life insurance. The illustrations are good, references to the original articles are given, and the book seems complete.

Principles of Therapeutics. By A. Manquat, national correspondent to the Academie de Medicine. Translated by M. Sinbad Gabriel, M. D. New York and London: D. Appleton and Company, 1910. Cloth net $3.00.

The subject matter of this book is well chosen. The author does not, as some might suppose, take up drugs, etc., and tell of their actions and uses. Rather he gives the why's and the wherefore's of the methods and manners of treating a patient. He gives his reasons for the different action of remedies when used by different men, or in different ways. The doctor exposes the supposed remarkable cures some physicians have when, by the neglect of some matter of asepsis, they have infected the patient, as in the frequently occurring case of passing a catheter. When for some reason physicians are changed, the proper course of procedure for the new attendant is discussed. On the whole the book is very entertaining reading, and would give many a man more than one good idea. There is only one drawback, and that is not serious. The book was translated by a foreigner, and the idiomatic expressions are always a source of delight.

BOOKS RECEIVED

Transactions of the Fourth International Sanitary Conference of the American Republics, held in San Jose, Costa Rica, December 25, 1909, to January 3, 1910. Published and distributed under the auspices of the Pan-American Union, John Barrett, Director General, Washington, D. C., 1910.

"World Corporation," by King Camp Gillette. The New England News Company, Boston.

"The Saw and Crushing Instruments in Surgery of the Nasal Septum," by Bryan DeF. Sheedy, M. D., New York. Reprint.

Abstract of Proceedings United States Pharmacopœal Convention, 1910.

Transactions of The Medical Association of the State of Alabama, organized 1847—meeting of 1910. Mobile, April 19-22.

NEWS

Dr. Frank Smithies, of Ann Arbor, has been seriously ill for two or three weeks, under the care of Dr. A. W. Hewlett. As we go to press we are informed that he is convalescing rapidly, and will soon be able to care for his practice.

AS OTHERS SEE US

Some kind friend has sent to the JOURNAL, all the way from Imlay City, which, be it known, is in Lapeer County,—and that, gentle reader, is in the fair State of Michigan,—a copy, duly marked, of the *Imlay City Times*, a paper. The paragraph marked contains the information that a palpitating world has long awaited; the real nature of the frailty of age and the loss of vigor that comes with the passing years. It is "tox cord, or toxic cord." In some mysterious way a drop of blood gets in the bony canals that let nerves out from the cord to all the organs of the body, and this drop of blood dies, or gets tired, or gets toxic; it may even lead to blindness, unless "Dr. Harlan" takes a whack at the poor victim, and then, of course, he is restored to youth and vigor and relieved of his blindness. Treatments are only $2 each, but *spot cash*. Is there anything that human credulity will not swallow? Is there any sort of fake that can not be "put over"?—*California State Journal of Medicine*, January, 1911.

Persistent lymphedema of the breast may be the first, and for a long time the only sign of a scirrhus carcinoma.—*American Journal of Surgery.*